



Combi oven

 Read instructions before use

OES mini easyTouch

Installation manual - Original, ENG

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1 General

Purpose of this chapter

This chapter shows you how to identify your combi oven and provides guidance on using this manual.

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 9001:2008 and ISO 14001:2004.

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.

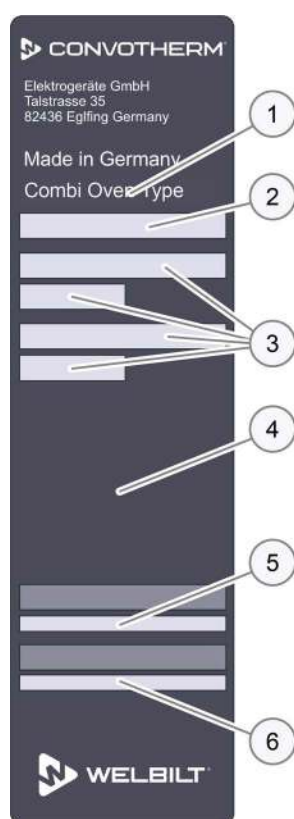
1.2 Identifying your combi oven

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

You can use the type plate to identify your appliance. The type plate has the following layout:



Item	Name	
1	Name of appliance Combi Oven	
2	Trade name	
	Element:	Meaning:
	OES	Electric appliance with water injection
	numbers xx.yy	Appliance size
	▪ mini ▪ mini 2in1	Appliance series
3	Electrical values	
4	Appliance tests	
5	Serial number	
6	Part number	

1.3 Structure of customer documentation

Contents of customer documentation

The customer documentation for the combi oven includes the following documents:

- Installation manual (this document)
- User manual
- Operating instructions for easyStart mode
- Help facility included in the software (extracts from the user manual)

Structure of customer documentation

The following table shows the topics and structure of the customer documentation:

Topic	Description	See
Transportation	Moving the combi oven	Installation manual
Setting up the appliance	▪ Setup options ▪ How to set up the combi oven correctly	(intended for trained professional staff; see Requirements to be met by personnel)
Installation	▪ Electrical connection ▪ Water connection ▪ Installing the ConvoClean fully automatic oven cleaning system (optional)	
Putting into service	How to prepare the combi oven for first-time use	
Operation	▪ Describes the user interface ▪ Working procedures and operating steps	User manual
Cleaning	▪ Cleaning instructions ▪ Cleaning programs and cleaning tasks	(intended for untrained staff and trained professional staff; see Requirements to be met by personnel)
Servicing	▪ Servicing schedule ▪ Minor servicing tasks	
Removal from service	How to take the combi oven out of operation	Installation manual
Technical data	▪ Shelf options ▪ Maximum load	User manual
	The complete technical specification for the combi oven	Installation manual
Dimensional drawings, connection points	All dimensional drawings and connection points of the combi oven	Installation manual
Checklists	Installation checklists	

1.4 Essential reading relating to safety

Safety information in the customer documentation

Safety information relating to the combi oven mainly appears 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 moving, 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', see For your safety on page 15
- the sections that describe the activity to be carried out

Danger symbol

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



Form of warning notices

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

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

1.5 About this installation manual

Purpose

This installation manual is intended for all people who work with the combi oven, and provides them with the necessary information for proper and safe working when moving, setting up and installing the appliance and when putting the appliance into service.

Who should read this manual

This installation manual is aimed at the following groups:

Name of target group	Tasks
Equipment mover	Conveying within the establishment
Service engineer	▪ Setting up the appliance ▪ Installing and removing the water connection ▪ Installing the ConvoClean fully automatic oven cleaning system (optional) ▪ Putting the appliance into service and removing the appliance from service ▪ Customer guidance and instruction.
Electrical fitter	Installing and removing the electrical supply

Chapters in the installation manual

The table below lists the chapters in this manual and summarizes their content and purpose:

Contents	Purpose
General	▪ Shows you how to identify your combi oven ▪ Provides guidance on using this installation manual
Design and function	▪ Specifies the intended use of the combi oven ▪ Explains the functions of the combi oven and shows the position of its components
For your safety	Describes the hazards posed by the combi oven and suitable preventive measures It is important that you read this chapter carefully.
Transportation	▪ Specifies the basic appliance dimensions ▪ Specifies the requirements for the installation position ▪ Explains how to convey the appliance to the installation position
Setting up the appliance	▪ Explains how to unpack the appliance and specifies the parts supplied with the appliance ▪ Explains how to set up the combi oven
Installation	Provides information on installing the: ▪ Electrical connection ▪ Water connection ▪ ConvoClean fully automatic oven cleaning system (optional)
Putting into service	Explains the procedure for preparing the appliance for first-time use
Removal from service, disposal	▪ Explains the procedure for taking appliance out of service ▪ Contains disposal instructions
Technical data	Contains the technical data

Contents	Purpose
Dimensional drawings and connection diagrams	Contains the dimensional drawings and connection plans.
Checklists and completion of installation	▪ Contains the checklists for ▪ Installation ▪ Safety devices and warnings ▪ Customer guidance and instruction ▪ Contains information on the warranty and explains the completion procedure using the checklists

Notation for decimal points

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

2 Design and function

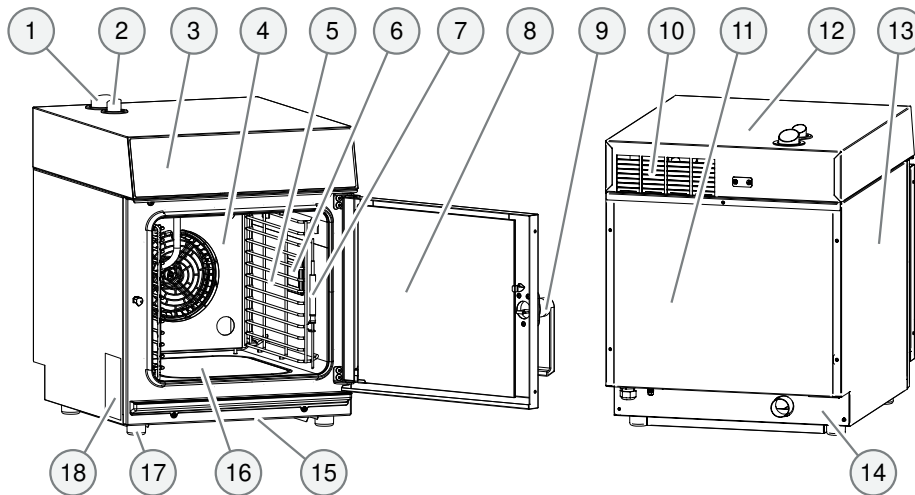
Purpose of this chapter

This chapter describes the design and construction of the combi oven and explains its functions.

2.1 Design and function of the combi oven (6.06/6.10/10.10 mini)

Layout of the combi oven

The following figure shows the 6.06 mini combi oven (representative of all appliance sizes):



Components of the combi ovens and their function

The components of the combi oven have the following function:

No.	Name	Function
1	Ventilation port	External air intake for removing the moisture from the cooking chamber
2	Air vent	Lets vapour escape
3	Operating panel	Used for operating the combi oven
4	Suction panel	Distributes the heat 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	- Opens and closes the appliance door - Venting position for opening the combi oven door safely (with safety catch option)
10	Ventilation slots	Used for ventilation
11	Rear wall	Covers the wiring compartment of the combi oven
12	Top box	Covers the controller electronics of the combi oven
13	Outer casing	Used for covering the appliance interior
14	Connecting bracket	Used for covering the connection area
15	Hole between the front appliance feet	Used for venting air out of appliance

No.	Name	Function
16	Cooking chamber	Contains the food during cooking operation
17	Appliance feet	- Used for setting up and adjusting level of appliance - Height adjustable on 10.10 mini
18	Type plate	Used for identifying the combi oven

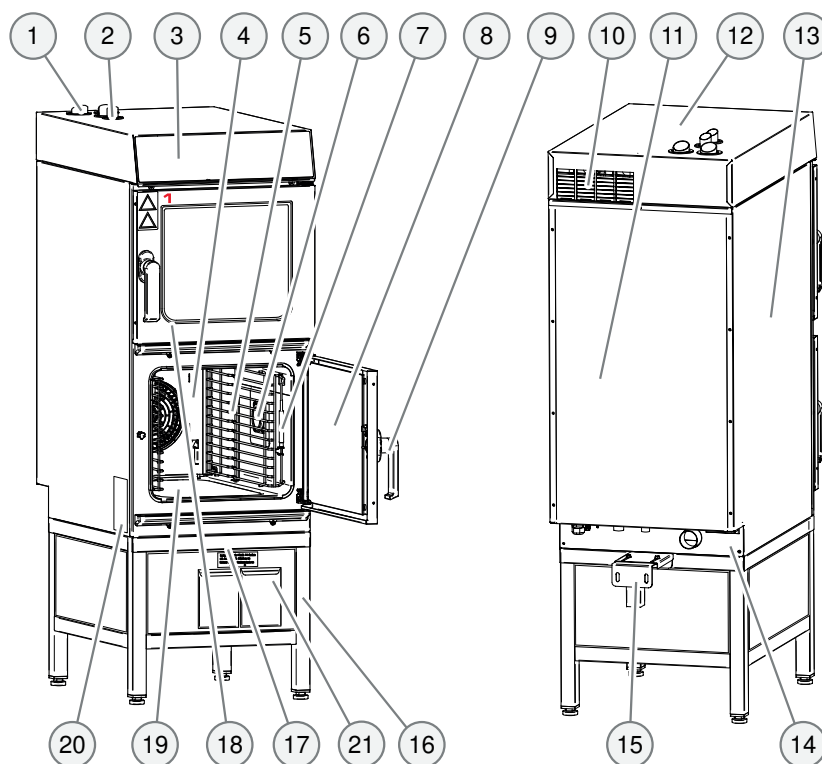
Material

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

2.2 Layout and function of the combi oven (6.10 mini 2in1)

Layout of the combi oven

The following diagram shows the combi oven:



Components of the combi ovens and their function

The components of the combi oven have the following function:

No.	Name	Function
1	2 Ventilation ports	External air intake for removing the moisture from the cooking chamber
2	2 air vents	Lets vapour escape
3	Operating panel	Used for operating the combi oven
4	Suction panel	Distributes the heat inside the cooking chamber
5	Rack	Holds standard-sized food containers
6	Oven light	Illuminates the cooking chamber
7	Core temperature probe	Used for measuring the core temperature
8	Appliance door	Closes the cooking chamber

No.	Name	Function
9	Door handle	Opens and closes the appliance door
10	Ventilation slots	Used for ventilation
11	Rear wall	Covers the wiring compartment of the combi oven
12	Top box	Covers the controller electronics of the combi oven
13	Outer casing	Used for covering the appliance interior
14	Connecting bracket	Used for covering the connection area
15	Wall bracket	Used to fix the combi oven to a wall
16	Stand	Brings the appliance up to working height
17	Ventilation slots in the appliance floor	Used for venting air out of appliance
18	Cooking chamber 1	Contains the food during cooking operation
19	Cooking chamber 2	Contains the food during cooking operation
20	Type plate	Used for identifying the combi oven
21	Cleaning agent drawers	Contain the cleaning agent and rinse aid for fully automatic cleaning ConvoClean system

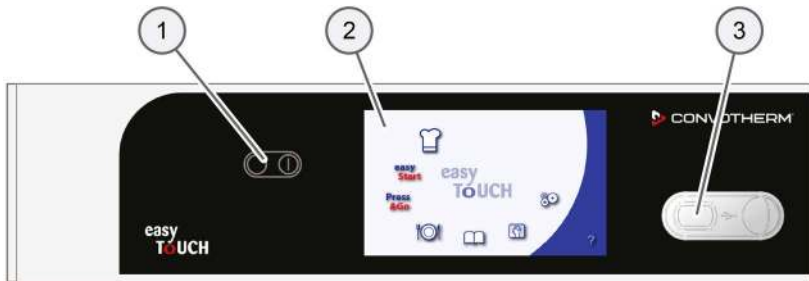
Material

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

2.3 Layout and function of the operating panel

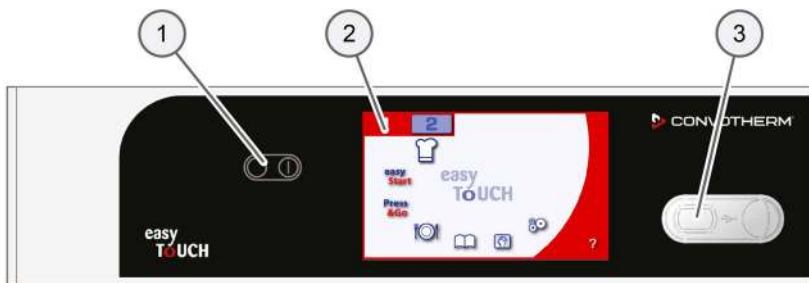
Layout of the operating panel

The following illustration shows the operating panel:



Layout of the operating panel (6.10 mini 2in1)

The following illustration shows the operating panel:



Elements of the operating panel

The elements of the operating panel have the following function:

No.	Name	Function
1	Main switch	Switches the combi oven on and off
2	Touchscreen	Central control of combi oven ▪ Appliance operated by touching icons on control panel pages ▪ Status displays Only for 6.10 mini 2in1: Central control of both cooking chambers of the combi oven ▪ Switching from one cooking chamber to the other
3	USB port	For connecting external appliances

3 For your safety

Purpose of this chapter

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

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

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

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

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 ...

Related topics

▷ Intended use of your combi oven	17
▷ Warning signs on the combi oven (6.06/6.10/10.10 mini)	18
▷ Warning signs on the combi oven (6.10 mini 2in1)	20
▷ Hazards and safety precautions when moving the appliance	22
▷ Hazards and safety precautions when setting up the appliance	23
▷ Hazards and safety precautions during installation	25
▷ Hazards and safety precautions when putting the appliance into service	27
▷ Hazards and safety precautions when removing the appliance from service	30
▷ Safety devices (6.06/6.10/10.10 mini)	33
▷ Safety devices (6.10 mini 2in1)	35
▷ Requirements to be met by personnel, working positions	37
▷ Personal protective equipment	39

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 substances or objects with a flash point below 270 °C, such as highly flammable oils, fats or 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 37 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 92.

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
- 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

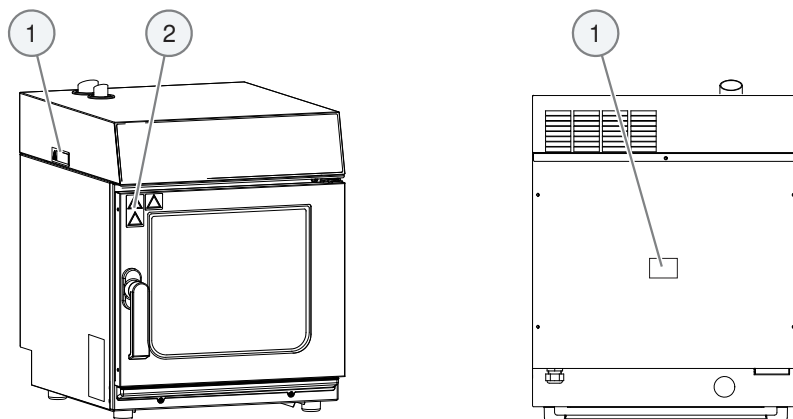
- Use only cleaning agents that have been approved by the manufacturer.
- High-pressure cleaners must NOT be used for cleaning.
- Water jets must NOT be used for cleaning the exterior. The water spray from the recoil hand shower must only be used for cleaning the cooking chamber.
- The combi oven must NOT be treated with acids or exposed to acid fumes, except for the purpose of descaling the cooking chamber and the boiler by an authorized service company in accordance with the manufacturer's instructions.

3.3 Warning signs on the combi oven (6.06/6.10/10.10 mini)

Where are the warning signs fitted?

The following figure shows the 6.06 mini combi oven (representative of all appliance sizes).

The warning signs are located in the following positions:



Warnings on the appliance door

The following warning signs (2) are fitted on the appliance door above the door handle:

Warning sign	Description
	Warning of hot food, hot food containers and hot liquids 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. 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.
	Hot steam and vapour hazard warning There is a risk of scalding from hot steam and vapour escaping when the appliance door is opened.
	Only for ConvoClean system option Warning of corrosive cleaning agents injected into oven 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 by the ConvoClean system.
	Only for a mobile supporting structure Tipping or toppling warning for combi oven There is a risk of the combi oven toppling over if moved. Always take great care when moving the combi oven.
	Only for a mobile supporting structure Damage or detachment warning for appliance connections 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. After moving, always secure the combi oven against rolling away.

Warning signs on the combi oven case

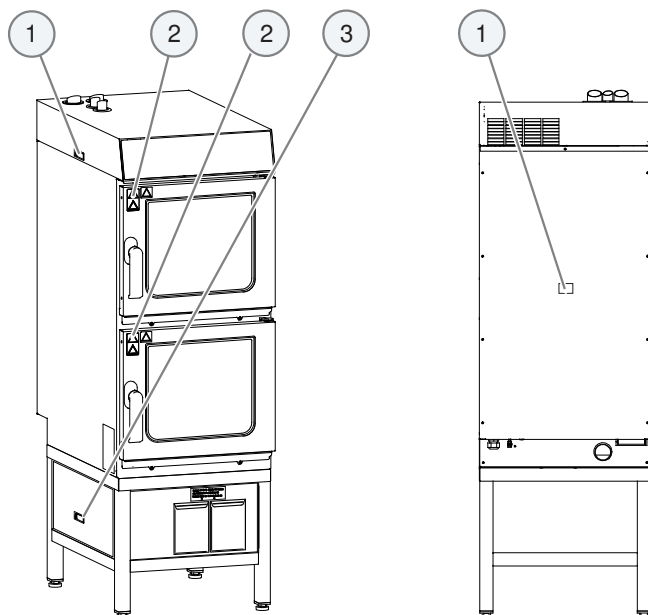
The following warning signs (1) are fitted on the case of the combi oven:

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

3.4 Warning signs on the combi oven (6.10 mini 2in1)

Where are the warning signs fitted?

The warning signs are located in the following positions on the combi oven:



Warnings on the appliance door

The following warning signs (2) are fitted on the appliance doors above the door handles:

Warning sign	Description
	Warning of hot food, hot food containers and hot liquids 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. 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.
	Hot steam and vapour hazard warning There is a risk of scalding from hot steam and vapour escaping when the appliance door is opened.
	Warning of corrosive cleaning agents injected into oven 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 by the ConvoClean system.

Warning signs on the combi oven case

The following warning signs (1) are fitted on the case of the combi oven:

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

Warning signs on the case of the cleaning agent drawers

The following warning sign (3) is mounted on the case of the cleaning agent drawers:

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

3.5 Hazards and safety precautions when moving the appliance

Safety hazard: moving heavy weights

When moving the appliance, be aware of the following hazards and take the specified preventive actions:

Danger	Where or in what situations does the hazard arise?	Preventive action	Safety device
Risk of injury from over-stressing your body	When moving the appliance	▪ Use suitable lifting gear ▪ Do not exceed safety limits for lifting and carrying ▪ Use lifting straps ▪ Wear personal protective equipment	None

Safety hazard: mechanical parts of the appliance

When moving the appliance, be aware of the following hazards and take the specified preventive actions:

Danger	Where or in what situations does the hazard arise?	Preventive action	Safety device
Risk of body parts being crushed if the appliance is dropped	When moving the appliance	▪ Use suitable handling gear ▪ Move the appliance slowly and carefully, and secure it against tipping over ▪ Make sure center of gravity is balanced ▪ Avoid jolts	None
Risk of body parts being crushed if the appliance tips over or falls off	When placing the appliance down on the supporting surface	Always observe the requirements for the supporting surface while setting up the appliance; see Requirements for the installation location on page 44	None

3.6 Hazards and safety precautions when setting up the appliance

Safety hazard: moving heavy weights

When setting up the appliance, be aware of the following hazards and take the specified preventive actions:

Danger	Where or in what situations does the hazard arise?	Preventive action	Safety device
Risk of injury from over-stressing your body	When moving the appliance	▪ Use suitable lifting equipment for placing the appliance on the work surface, on the stand, in the stacking kit or in the installation location (dependent on appliance size) ▪ Always use the correct number of persons and observe the limits specified for lifting and carrying when adjusting the appliance position ▪ Observe the local occupational safety regulations ▪ Wear personal protective equipment For 10.10 mini / 6.10 mini 2in1: ▪ Use lifting straps to take the appliance off the pallet	None

Safety hazard: mechanical parts of the appliance

When setting up the appliance, be aware of the following hazards and take the specified preventive actions:

Danger	Where or in what situations does the hazard arise?	Preventive action	Safety device
Risk of body parts being crushed if the appliance is dropped	When lifting the appliance	- Make sure center of gravity is balanced - Avoid jolts	None
For 6.06/6.10/10.10 mini: Risk of crushing due to loss of appliance stability if the appliance is mounted on a stand or in a stacking kit	- When installing the appliance on the oven stand - When fitting the appliances in the stacking kit - When a heavy load is applied to the top appliance alone	- Never exert an extra pressure on the appliances, e.g. by leaning on the open appliance door - Before fitting the appliances in a wheeled stacking kit, secure the stacking kit by engaging the parking brake on the wheels - Always fit the bottom appliance first in the stacking kit - Make sure that the appliances are seated correctly in the stacking kit	Parking brake on wheeled stacking kit
Risk of body parts being crushed if the appliance tips over or falls off	When installing the appliance on the floor	Always observe the requirements for the supporting surface while setting up the appliance; see Requirements for the installation location on page 44	None
Risk of cuts from sharp edges	When handling sheet-metal parts	- Exercise caution when performing these tasks - Wear personal protective equipment as specified in safety regulations	None

3.7 Hazards and safety precautions during installation

Safety hazard: electrical power

When installing the appliance, be aware of the following hazards and take the specified preventive actions:

Danger	Where or in what situations does the hazard arise?	Preventive action	Safety device
Risk of electric shock from live parts	▪ Under covers ▪ Under the operating panel ▪ On the power supply cable	▪ Work on the electrical system must only be performed by qualified electricians from an authorized service company ▪ Professional working	Covers
		Before removing the covers: ▪ 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 ▪ If the appliance has previously been connected to the electricity supply, wait 15 minutes to allow the DC bus capacitors to discharge ▪ Make sure that the appliance is de-energized	Covers
		▪ Ensure that all electrical connections are in perfect condition and fixed securely before putting the appliance into service	Covers
Risk of electric shock from live parts	▪ On the appliance and on adjacent metal parts ▪ On the appliance and on adjacent metallic accessories	▪ Before preparing the appliance for first-time use, make sure that the appliance, including all metallic accessories, is connected to a equipotential bonding system.	Equipotential bonding system
Risk of electric shock from incorrect water connection	▪ In the entire work area, as soon as the water pipe bursts or starts leaking	▪ Use a fixed connection ▪ Make sure that the water pressure of the water supply is compatible with the pressure specified on the appliance ▪ Use suitable pipes and hoses in accordance with applicable regulations (EN 61770 in countries where European standards apply)	none

Safety hazard: mechanical parts of the appliance

When installing the appliance, be aware of the following hazards and take the specified preventive actions:

Danger	Where or in what situations does the hazard arise?	Preventive action	Safety device
Risk of cuts from sharp edges	When handling sheet-metal parts	▪ Exercise caution when performing these tasks ▪ Wear personal protective equipment as specified in safety regulations	None

Safety hazard: cleaning agent

When installing the appliance, be aware of the following hazards and take the specified preventive actions:

Danger	Where or in what situations does the hazard arise?	Preventive action	Safety device
Risk of chemical burns or irritation to skin, eyes and respiratory system from contact with cleaning agents and their vapours.	When corrosive cleaning agents are used	Only use those cleaning agents specified under Cleaning agents in the 'Cleaning and Servicing' chapter of the user manual.	None
	For 6.06/6.10/10.10 mini with ConvoClean system option: When fitting the cleaning system	▪ Wear personal protective equipment ▪ Observe the labels on the cleaning agents and the relevant safety data-sheets	None
	For 6.10 mini 2in1: When handling the cleaning agent drawer and rinse aid drawer	▪ Wear personal protective equipment ▪ Close the cleaning agent drawer and rinse aid drawer carefully without jolting to avoid any cleaning agent slopping out.	None

3.8 Hazards and safety precautions when putting the appliance into service

Safety hazard: electrical power

When preparing the appliance for first-time use, be aware of the following hazards and take the specified preventive actions:

Danger	Where or in what situations does the hazard arise?	Preventive action	Safety device
Risk of electric shock from live parts	▪ Under covers ▪ Under the operating panel ▪ On the power supply cable	▪ Work on the electrical system must only be performed by qualified electricians from an authorized service company ▪ Professional working	Covers
		Before removing the covers: ▪ 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 ▪ If the appliance has previously been connected to the electricity supply, wait 15 minutes to allow the DC bus capacitors to discharge ▪ Make sure that the appliance is de-energized	Covers
		▪ Ensure that all electrical connections are in perfect condition and fixed securely before putting the appliance into service	Covers
Risk of electric shock from live parts	▪ On the appliance and on adjacent metal parts ▪ On the appliance and on adjacent metallic accessories	▪ Before preparing the appliance for first-time use, make sure that the appliance, including all metallic accessories, is connected to a equipotential bonding system.	Equipotential bonding system

Safety hazard: moving appliances supported on a wheeled platform

Danger	Where or in what situations does the hazard arise?	Preventive action	Safety device
All specified hazards	While appliances are being moved on a wheeled platform	▪ Before moving appliances with a fixed wastewater connection, disconnect the drain pipe ▪ Disconnect the appliance from the electrical supply before moving it ▪ Before moving (for instance to clean the case of the combi ovens or to clean the floor), check whether the retaining device which restricts the radius of movement of the platform plus appliance is connected. ▪ When moving the appliance, take care not to wheel over the electrical supply cables or the water pipes	Retaining device
Risk of crushing of body parts	While appliances are being moved on a wheeled platform	▪ Watch out for the connecting cables and pipes. ▪ Use at least two people to move it	None
Pinch point hazard for hands and feet	While appliances are being moved on a wheeled platform	▪ Keep the appliance doors closed	None
Risk of scalding from hot wastewater	While appliances are being moved on a wheeled platform	▪ Let the appliance cool down ▪ Wipe up immediately any water spillages ▪ Wear protective clothing	None
Risk of scalding from hot liquid food	While appliances are being moved on a wheeled platform	▪ Always remove any food from the appliances before moving them	None
Risk of electric shock from live parts	While appliances are being moved on a wheeled platform	▪ Watch out for connected electrical cables and water pipes	None
Risk of skin and eye irritation from contact with cleaning products	While appliances are being moved on a wheeled platform	▪ Make sure that the connecting lines and pipes are long enough ▪ Keep cleaning-fluid canisters closed when moving the base	None
Risk of tripping from exposed cables and pipes	While cleaning behind appliances when pulled forward	▪ Exercise caution when performing this action	None
Risk of falling on wet floor caused by wastewater	▪ While cleaning behind appliances when pulled forward ▪ In front of the appliances	▪ Wipe up immediately any water spillages ▪ Make sure that the connecting lines and pipes are long enough	None
Risk of falling on wet floor caused by cleaning fluids	▪ While cleaning behind appliances when pulled forward ▪ In front of the appliances	▪ Keep the cleaning-fluid canisters closed when moving appliances	None

Additional safety hazards when putting the appliance into service

When preparing the appliance for first-time use, read and follow the safety information given in this chapter and also the following topics in the chapter 'For your safety' in the user manual:

- Hazards and safety precautions during operation
- Hazards and safety precautions during cleaning
- Personal protective equipment

3.9 Hazards and safety precautions when removing the appliance from service

Safety hazard: electrical power

When taking the appliance out of service, be aware of the following hazards and take the specified preventive actions:

Danger	Where or in what situations does the hazard arise?	Preventive action	Safety device
Risk of electric shock from live parts	▪ Under covers ▪ Under the operating panel	▪ Work on the electrical system must only be performed by qualified electricians from an authorized customer service company ▪ Professional working Before removing the covers: ▪ 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 ▪ Make sure that the appliance is de-energized	Covers

Safety hazard: moving heavy weights

When taking the appliance out of service, be aware of the following hazards and take the specified preventive actions:

Danger	Where or in what situations does the hazard arise?	Preventive action	Safety device
Risk of injury from over-stressing your body	When moving the appliance	▪ Use suitable lifting gear ▪ Do not exceed safety limits for lifting and carrying ▪ Use lifting straps ▪ Wear personal protective equipment	None

Safety hazard: moving appliances supported on a wheeled platform

Danger	Where or in what situations does the hazard arise?	Preventive action	Safety device
All specified hazards	While appliances are being moved on a wheeled platform	▪ Disconnect the appliance from the electrical supply before moving it ▪ Before moving appliances with a fixed wastewater connection, disconnect the drain pipe ▪ Before moving (e.g. to access the back of the appliance), check that the retaining device is connected. This device restricts the range of movement of the platform supporting the appliance. ▪ When moving the appliance, take care not to wheel over the electrical supply cables or the water pipes	Retaining device
Risk of crushing of body parts	While appliances are being moved on a wheeled platform	▪ Watch out for the connecting cables and pipes. ▪ Use at least two people to move it	None
Pinch point hazard for hands and feet	While appliances are being moved on a wheeled platform	Keep the appliance doors closed	None
Risk of scalding from hot wastewater	While appliances are being moved on a wheeled platform	▪ Let the appliance cool down ▪ Wipe up immediately any water spillages ▪ Wear personal protective clothing	None
Risk of scalding from hot liquid food	While appliances are being moved on a wheeled platform	Always remove any food from the appliances before moving them	None
Risk of electric shock from live parts	While appliances are being moved on a wheeled platform	Watch out for connected electrical cables and water pipes.	None
Risk of skin and eye irritation from contact with cleaning products	While appliances are being moved on a wheeled platform	▪ Make sure that the connecting lines and pipes are long enough ▪ Keep cleaning-fluid canisters closed when moving the base	None
Risk of tripping from exposed cables and pipes	While cleaning behind appliances when pulled forward	Exercise caution when performing this action	None
Risk of falling on wet floor caused by wastewater	▪ While cleaning behind appliances when pulled forward ▪ In front of the appliances	▪ Wipe up immediately any water spillages ▪ Make sure that the connecting lines and pipes are long enough	None
Risk of falling on wet floor caused by cleaning fluids	▪ While cleaning behind appliances when pulled forward ▪ In front of the appliances	Keep the cleaning-fluid canisters closed when moving appliances	None

Safety hazard: mechanical parts of the appliance

When taking the appliance out of service, be aware of the following hazards and take the specified preventive actions:

Danger	Where or in what situations does the hazard arise?	Preventive action	Safety device
For 6.10 mini 2in1: Risk of body parts being crushed if the appliance is dropped	When lifting the appliance	- Make sure center of gravity is balanced - Avoid jolts	None
For 6.06/6.10/10.10 mini: Risk of crushing due to loss of appliance stability if the appliance is mounted in a stand or in a stacking kit	- When removing the appliance from the stand - When removing the appliances from the stacking kit - When a heavy load is applied to the top appliance alone	- Never exert an extra pressure on the appliances, e.g. by leaning on the open appliance door - Before removing the appliances from a wheeled stacking kit, secure the stacking kit by engaging the parking brake on the wheels - Always remove the top appliance first from the stacking kit	Parking brake on wheeled stacking kit
Risk of cuts from sharp edges	When handling sheet-metal parts	- Exercise caution when performing these tasks - Wear personal protective equipment as specified in safety regulations	None

Safety hazard: cleaning agent

Danger	Where or in what situations does the hazard arise?	Preventive action	Safety device
Risk of chemical burns or irritation to skin, eyes and respiratory system from contact with cleaning agents and their vapours.	- When removing the cleaning system - When disposing of the appliance	- Wear personal protective equipment - Observe the labels on the cleaning agents and the relevant safety data-sheets	None

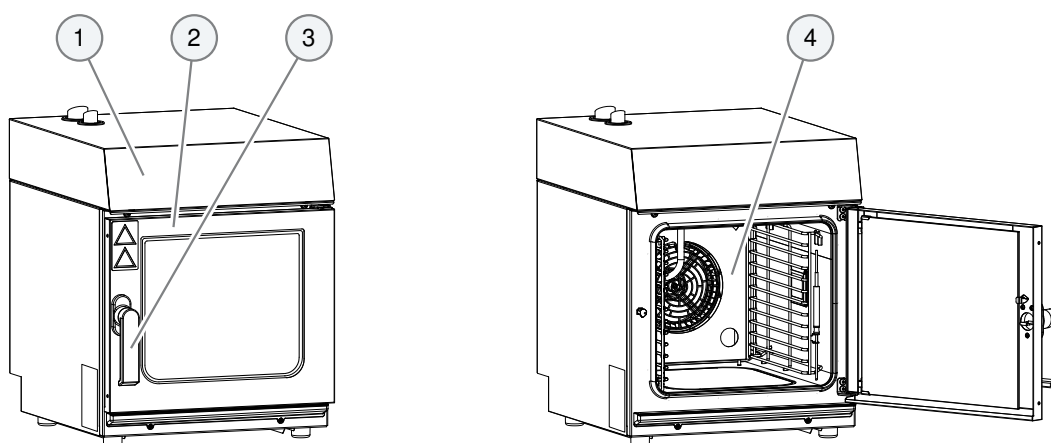
3.10 Safety devices (6.06/6.10/10.10 mini)

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

The following figure shows the location of the safety devices on a 6.06 mini combi oven with the safety catch option (representative of all appliance sizes):



Functions

The following table enumerates all the safety devices on the combi oven, explains their function and describes the check procedure:

No.	Safety device	Function	Check
1	Covers can only be removed using a tool	- Prevents live parts from being touched accidentally - Prevents access to the moving fan from the wiring compartment	Check that the covers are in place
2	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
	For the safety catch option: Appliance door with magnetic switch	Magnetic door switch (electrical door sensor): - When the appliance door is opened, the switch stops: - rotation of the fan wheel (comes to a stop after a few seconds) - operation of the heating element - Distribution of the cleaning agent by the fully automatic oven cleaning system (for ConvoClean system option) - Prompt to close the appliance door	Check magnetic door switch at low temperature Action: - Open the appliance door fully - Press Start Result: Motor must not start up

No.	Safety device	Function	Check
3	For the safety catch option: On-latch position of appliance door	Prevents scalding of user's face and hands from escaping steam	When appliance is at low temperature, check door positions as described in 'Opening and closing the appliance door safely' in the user manual
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 'Removing and fitting the suction panel' in the user manual for further details.
5 (no picture)	for ConvoClean system option: Automatic safety rinsing after power failure in case cleaning agent left in combi oven	Re-starts fully automatic cleaning (ConvoClean system) in a defined state after power failure	Test is a software function
6 (no picture)	For ConvoClean system option: Spray-guard	Stops the cleaning agent being injected during fully automatic cleaning (ConvoClean system) when the appliance door is opened Prompt to close the appliance door	Test is a software function
7 (installed by customer)	Disconnecter	- Installed by the customer close to the appliance; easily visible and accessible, 3-pole action, minimum contact separation 3 mm. - Used to disconnect the appliance from the power supply during cleaning, repair and servicing work and in a hazardous situation	Action: - Trip the disconnecter - Check at the -X10 terminal strip on the appliance that none of the three phases carry a live voltage
8 (no picture)	When installing on a wheeled supporting structure: Retaining device	Restricts the range of movement of the assembly (supporting structure plus appliance) at the customer's site.	Check that the retaining device is connected

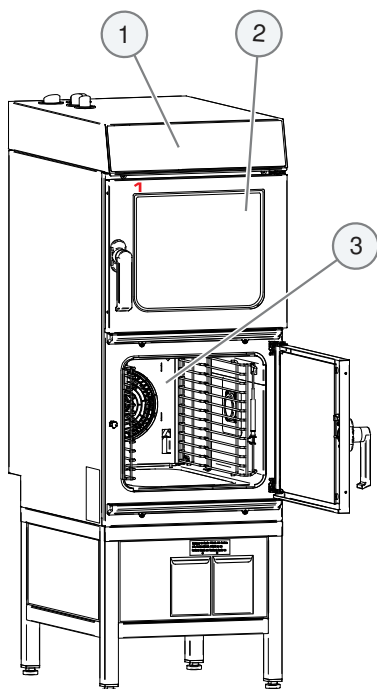
3.11 Safety devices (6.10 mini 2in1)

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

The following diagram shows the location of the safety devices:



Functions

The following table enumerates all the safety devices on the combi oven, explains their function and describes the check procedure:

No.	Safety device	Function	Check
1	Covers can only be removed using a tool	- Prevents live parts from being touched accidentally - Prevents access to the moving fan from the wiring compartment	Check that the covers are in place
2	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
3	Suction panel in cooking chamber; can only be removed using a tool	Prevents access to the moving fan and ensures good heat distribution	See 'Removing and fitting the suction panel' in the user manual for further details.
4 (no picture)	Automatic safety rinsing after power failure in case cleaning agent left in combi oven	Re-starts fully automatic cleaning (ConvoClean system) in a defined state after power failure	Test is a software function

No.	Safety device	Function	Check
5 (no picture)	Spray-guard	Stops the cleaning agent being injected during fully automatic cleaning (ConvoClean system) when the appliance door is opened Prompt to close the appliance door	Test is a software function
6 (no picture)	Block on simultaneous cooking and cleaning	Prevents cooking being performed in one cooking chamber while the other is being cleaned	Test is a software function
7 (installed by customer)	Disconnecter	- Installed by the customer close to the appliance; easily visible and accessible, 3-pole action, minimum contact separation 3 mm. - Used to disconnect the appliance from the power supply during cleaning, repair and servicing work and in a hazardous situation	Action: - Trip the disconnecter - Check at the -X10 terminal strip on the appliance that none of the three phases carry a live voltage

3.12 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	- 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 - As the representative for the entire team of operating personnel, is instructed by the start-up engineer on how to operate the appliance - Provides assistance as instructed with conveying the appliance within the establishment and setting up the appliance.
Equipment mover	- Trained in the use of a pallet truck and forklift truck - Knows the regulations associated with handling heavy loads	Conveying within the establishment
Service engineer	- Is an employee of an authorized service company - Has relevant technical training - Is trained in the particular appliance - Knows the regulations associated with handling heavy loads - Can assess whether the electrical, water supplies and the wastewater system have been connected correctly.	- Setting up the appliance - Installation of the fully automatic oven cleaning system (for Convo-Clean system option) - Putting the appliance into service - Removing the appliance from service
Electrical fitter	- Is an employee of an authorized service company - Has relevant professional training - Is a qualified electrician	- Connecting the appliance to the building's electrical supply - Disconnecting the electrical connection
Plumber	- Is an employee of an authorized service company - Has relevant professional training	- Connecting the appliance to the building's water supply - Disconnecting the water connection - Connecting the appliance to the building's drain connection - Disconnecting the drain connection
Start-up engineer (Service engineer)	- Is an employee of an authorized service company who has overall responsibility for preparing the combi oven for first-time use - Has relevant technical training - Is trained in the particular appliance - Knows the regulations associated with handling heavy loads - Can assess whether the electrical, water supplies and the wastewater system have been connected correctly.	- Instructing the owner and/or member of staff with relevant responsibility - Checking the work procedures and status values against the check-lists

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.

3.13 Personal protective equipment

Moving and setting up the appliance

When moving and setting up the combi oven, wear the following personal protective equipment:

Activity	Materials used	Personal protective equipment
- Conveying within the establishment For 6.06/6.10/10.10 mini: Setting up the appliance on a worktable, stand or in a stacking kit For 6.10 mini 2in1: Setting up the appliance in the installation location	- Lifting straps - Suitable lifting gear	- Protective gloves - Safety boots - Hard hat (e.g. when heavy loads are being lifted, working overhead,...)

Installation, putting into service and removal from service

Activity	Materials used	Personal protective equipment
Installing and removing (from service) the - Electrical connection - Water connection - Drain connection	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
Additionally for ConvoClean system option: Fitting and removing the fully automatic oven cleaning system	Tools and equipment depend on the task	Items of protection equipment, depending on cleaning agent being used: - Breathing mask - Safety goggles - Protective gloves - Protective clothing/apron 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.
- Putting the appliance into service - Instructing the user	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: - Protective clothing - Heat protective gloves (compliant with EN 407 in European Union) - Safety boots
Dismantling the appliance (removal from service)	- Lifting straps - Suitable lifting gear - Forklift truck or pallet truck	- Protective gloves - Safety boots - Hard hat (e.g. when heavy loads are being lifted, working overhead,...)

4 Transportation

Purpose of this chapter

This chapter provides information on how to move your appliance.

This chapter is intended for the user, as well as for installation technicians and authorized customer service staff.

4.1 Safe working when moving the appliance

For your safety

Before starting work, familiarize yourself with the hazards described in Hazards and safety precautions when moving the appliance on page 22.

Eligibility of personnel for moving the appliance

Personnel eligible for moving the appliance:

- Only personnel who are trained in the use of a pallet truck and fork-lift truck for handling purposes are permitted to move the appliance.
- Personnel must be aware of the regulations relating to handling heavy loads.

Personal protective equipment

Wear the personal protective equipment specified in the section 'Personal protective equipment' on page 39 of the 'For your safety' chapter for the relevant tasks.

Moving heavy loads

WARNING

Risk of injury from lifting incorrectly

When lifting the appliance, the weight of the appliance may lead to injuries, especially in the area of the torso.

- ▷ Use a fork-lift truck/pallet truck or suitable lifting gear to move the appliance.
- ▷ When lifting the appliance, use enough people for the weight of the appliance (guide value: 15 to 55 kg max., depending on age and gender). Observe the local occupational safety regulations.
- ▷ Wear personal protective equipment.

Unsuitable supporting surface

WARNING

Risk of crushing if the appliance tips over or falls off

Body parts can be crushed if the appliance tips over or falls off.

- ▷ Make sure that the appliance is never placed on an unsuitable supporting surface.

4.2 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 required minimum door size to allow the combi oven to be brought to its intended location:

Minimum door opening		6.06 mini	6.10 mini	10.10 mini	6.10 mini 2in1
Width	[mm]	580	580	580	800
Height	[mm]	830	830	1065	1750

Load bearing capability for conveying the appliance

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

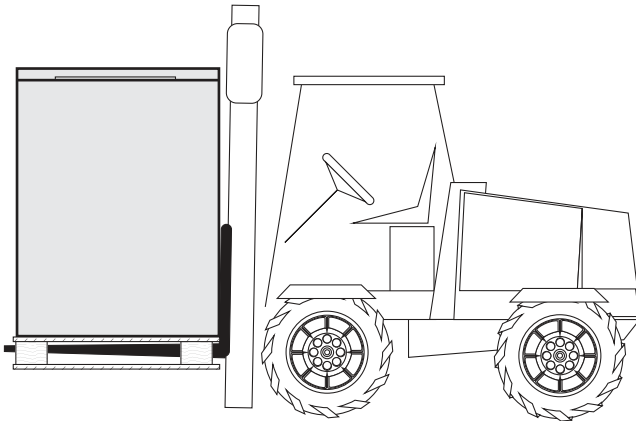
Refer to the weight of the appliances including packaging to determine the minimum working load limit of handling equipment; see 'Dimensions and weights'.

Moving the appliance to the installation location

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.

The following diagram illustrates how to move the appliance using a forklift truck:



5 Setting up the appliance

Purpose of this chapter

This chapter provides information on how to set up your appliance.

This chapter is intended for the user, as well as for installation technicians and authorized customer service staff.

5.1 Safe working when setting up the appliance

For your safety

Before starting work, familiarize yourself with the hazards described in Hazards and safety precautions when setting up the appliance on page 23.

Eligibility of personnel for setting up the appliance

Personnel eligible for setting up the appliance:

- Only skilled personnel from an authorized customer service office are permitted to set up the appliance.

Regulations for setting up the appliance

Local and national standards and regulations relating to workplaces in catering kitchens must be observed.

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

Personal protective equipment

Wear the personal protective equipment specified in the section 'Personal protective equipment' on page 39 of the 'For your safety' chapter for the relevant tasks.

Moving heavy loads

WARNING

Risk of injury from lifting incorrectly

When lifting the appliance, the weight of the appliance may lead to injuries, especially in the area of the torso.

- ▷ Use suitable lifting equipment for placing the appliance on the work surface, on the stand, in the stacking kit or in the installation location (for 6.10 mini 2in1).
- ▷ To shift the appliance into the correct position, lift the appliance using enough people for the weight of the appliance (guide value: 15 to 55 kg max., depending on age and gender). Observe the local occupational safety regulations.
- ▷ Use lifting straps to take the appliance off the pallet.
- ▷ Wear personal protective equipment.

Unsuitable supporting surface

WARNING

Risk of crushing if the appliance tips over or falls off

Body parts can be crushed if the appliance tips over or falls off.

- ▷ Make sure that the appliance is never placed on an unsuitable supporting surface.

5.2 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 44.
- 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 addition, please observe the following regulations:

- VDI Directive 2052 'Ventilation equipment for kitchens'
- Guidance from the local building authority for fume extraction systems

5.3 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.

Rules for setting up the appliance safely (6.06/6.10/10.10 mini)

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

- It must be possible to comply with the operating conditions. For operating conditions, see Requirements relating to the operating environment of the combi oven on page 17.
- There is a risk of fire from the heat emitted 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 43 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.
- It must be possible to set up the supporting structure for the appliance (work surface, stand or stacking kit) in the installation position so that it cannot tip over or slide about. The subfloor must satisfy relevant requirements.
- The structure supporting the appliance (stand or stacking kit) must be fixed so that it cannot tip over when subject to a one-sided load - e.g. appliance door is open.
- For appliances on a wheeled supporting structure, a retaining device must be connected to limit the range of movement of the assembly (supporting structure plus appliance) at the customer's site. The maximum distance that the supporting structure plus appliance can be pulled out is 0.5 m. The lengths of the supply cables and pipes must accommodate the range of movement allowed by the retaining device. When moving the assembly, never strain or wheel over the supply cables and pipes.
- It must be possible to lock the wheels on the supporting structure
- With the equipment currently fitted in this model, the appliance must not be used in environments in which the appliance might be subject to strong vibrations or jolting (e.g. on vehicles or on ships).
- Vibrations must be avoided when using wheeled oven stands or wheeled stacking kits.

⚠ Rules for setting up the appliance safely (6.10 mini 2in1)

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

- It must be possible to comply with the operating conditions. For operating conditions, see Requirements relating to the operating environment of the combi oven on page 17.
- There is a risk of fire from the heat emitted 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 43 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.
- 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.
- It must be possible to set up the appliance in the installation position so that it cannot tip over or slide about. The subfloor must satisfy relevant requirements.
- 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.
- In environments in which the appliance might be subject to strong vibrations or jolting (e.g. on vehicles or on ships), the appliance must be fixed in the installation position using the suitable accessory.
- Vibrations must be avoided.

Requirements for the subfloor

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.
- For 6.06/6.10/10.10 mini, the work surface or stand must have a load bearing capability 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 system option)
- Weight of stand or worktop (for 6.06/6.10/10.10 mini)

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

		6.06 mini	6.10 mini	10.10 mini	6.10 mini 2in1
Weight of combi oven when empty	[kg]	See weight excluding packaging in 'Dimensions and weights' on page 92			
Maximum permissible loading weight	[kg]	13	20	30	40
Maximum weight of cleaning agents	[kg]	20	20	20	9
Weight of stand	[kg]	9.7	12	10.6	-

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 minimum space requirement is needed in front of the appliances to operate the combi ovens safely, in particular to handle hot food safely.

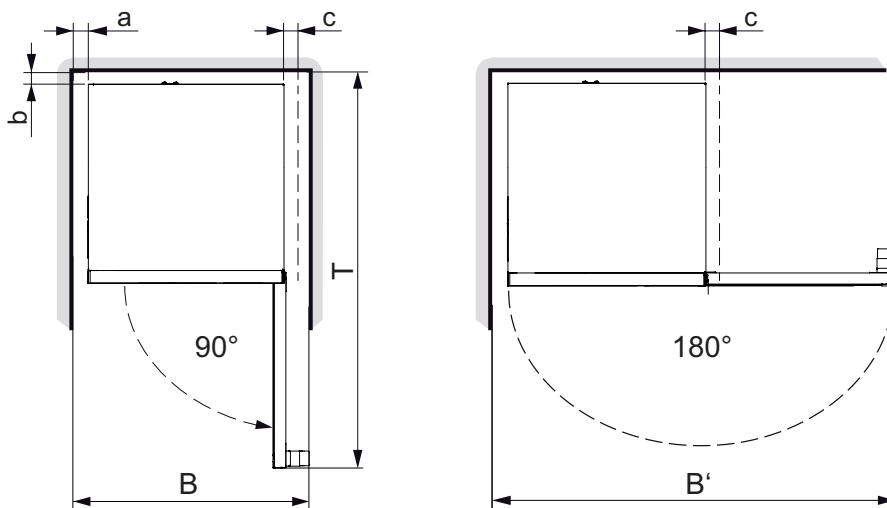
Larger wall gaps are generally recommended to provide access for servicing.

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

- Air vent on the top of the appliance
- Ventilation port on the top of the appliance
- Ventilation slots on the rear of the appliance
- Gap on the front of the appliance between the feet (for 6.06/6.10/10.10 mini)
- Ventilation slots in the appliance floor (for 6.10 mini 2in1)

Minimum space required - width and depth

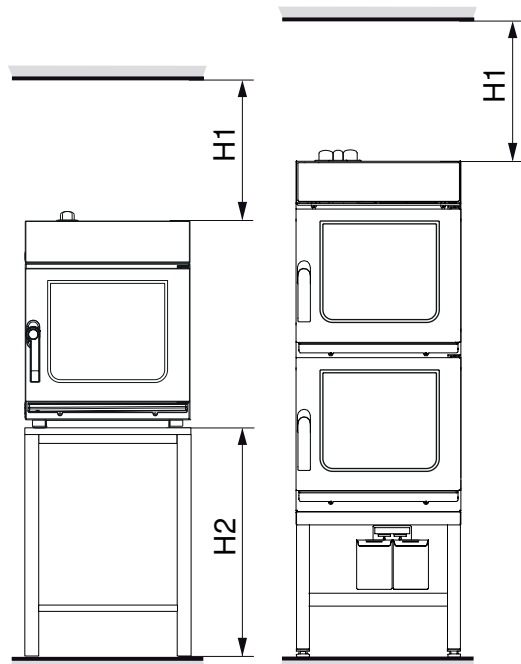
The following diagram and table show the space required for the appliance for different installation and operating situations. They also show the minimum horizontal distances from adjacent walls and surfaces:



Di- men- sion	Meaning	Space re- quired	6.06 mini	6.10 mini	10.10 mini	6.10 mini 2in1
B	Width requirement, appliance door open at 90°	[mm]	633	633	633	633
B'	Width requirement, appliance door open at 180°	[mm]	1055	1055	1055	1055
T	Depth requirement when opening the appliance door	[mm]	1137	1315	1315	1339
a	Safety clearance on left-hand side	[mm]	50	50	50	50
b	Safety clearance at rear	[mm]	50	50	50	50
c	Safety clearance on right-hand side	[mm]	50	50	50	50

Minimum space required - height

The following diagram and table show the vertical space needed by the appliance:



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.

Di- men- sion	Meaning	Space re- quired	6.06 mini	6.10 mini	10.10 mini	6.10 mini 2in1
H1	Guide value for the minimum vertical clearance	[mm]	500	500	500	500
H2	Installation height	[mm]	700 - 900	700 - 900	700 - 900	-

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

5.4 Unpacking

Checking the tip indicator

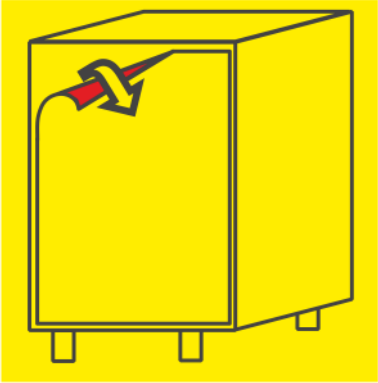
Before unpacking the appliance, check the tip indicator on the packaging.

The following table shows the possible tip'n'tell indications:

Indicator	Meaning	Action
	Silver dot: Appliance has been transported correctly.	- Unpack the appliance. - Compare the number on the tip indicator with the accompanying paperwork.
	Red dot: Appliance has been turned over or transported on its side.	- Check the goods for damage. - Compare the number on the tip indicator with the accompanying paperwork. - Note down on the accompanying paperwork the fact that the tip indicator has actuated and also any damage.

Unpacking the appliance

Unpack the appliance as follows:

Step	Action	Illustration
1	Remove the outer packaging.	
2	Remove all cardboard, packaging materials, customer documentation, labels and containers. Please ensure that you dispose of packaging in an environmentally friendly way.	
3	Pull off the protective film.	
4	Check the combi oven for damage. If you suspect the appliance has been damaged during transit, notify your dealer/carrier immediately. Please notify the manufacturer in writing within three days. Never install or put into service a damaged appliance under any circumstances.	

Scope of delivery (6.06/6.10/10.10 mini)

The following parts are supplied with the appliance:

- 1x combi oven
- 1x left-hand rack
- 1x right-hand rack
- 1x installation manual
- 1x user manual
- 1x easyStart operating instructions
- 1x 10-liter canister, empty (for ConvoClean system)

Scope of delivery (6.10 mini 2in1)

The following parts are supplied with the appliance:

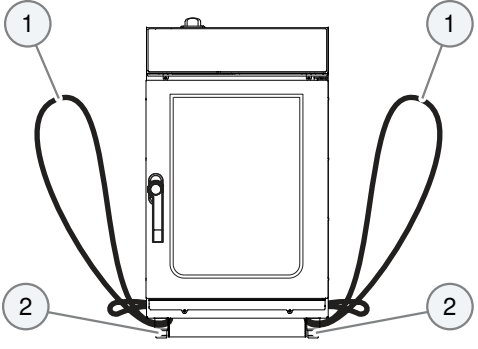
- 1x combi oven with 2 oven cooking chambers
- 2x left-hand rack
- 2x right-hand rack
- 1x installation manual
- 1x user manual
- 1x easyStart operating instructions
- 1x 10-liter canister, empty

5.5 Taking the appliance off the pallet

Using lifting straps to take the appliance off the pallet (10.10 mini)

The weight of your appliance is given in the Technical Data on page 92.

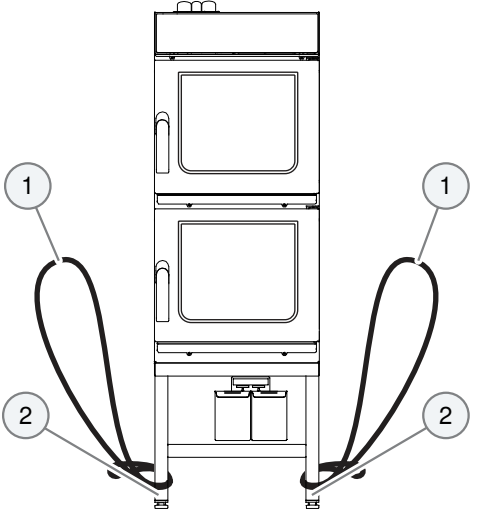
When lifting the appliance off the pallet, follow the steps below:

Step	Action	Illustration
1	Attach the lifting straps (1) to the appliance feet (2).	
2	Lift the appliance carefully off the pallet.	

Using lifting straps to take the appliance off the pallet (6.10 mini 2in1)

The weight of your appliance is given in the Technical Data on page 92.

When lifting the appliance off the pallet, follow the steps below:

Step	Action	Illustration
1	Attach the lifting straps (1) to the feet of the oven stand (2).	
2	Lift the appliance carefully off the pallet.	

5.6 Setting up the appliance on a worktable

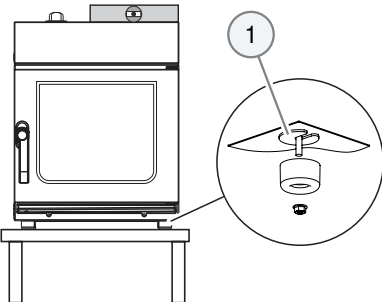
⚠ Rules for setting up the appliance safely

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.

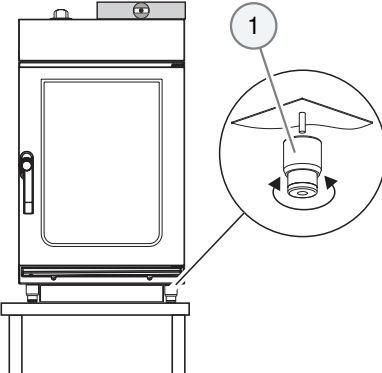
Setting up the appliance on a worktable (6.06/6.10 mini)

When setting up an appliance on a work surface, follow the steps below:

Step	Action	Illustration
1	Position the appliance on the worktable.	
2	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)

When setting up an appliance on a work surface, follow the steps below:

Step	Action	Illustration
1	Position the appliance on the worktable.	
2	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.	

5.7 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

When setting up the appliance on a stand, follow the steps below:

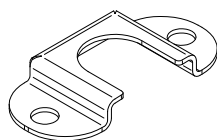
Step	Action	Illustration
1	Position the appliance on the stand	
2	Ensure the stand is horizontal by adjusting the height of the feet (1). Use a spirit level to ensure the unit is horizontal in all directions.	
3	Locate the appliance feet in the receptacles on the stand (2).	
4	Screw the appliance onto the stand using the screws supplied (3).	
5	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:



5.8 Setting up the appliance on a wheeled 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.
- For appliances on a wheeled supporting structure, a retaining device must be connected to limit the range of movement of the assembly (supporting structure plus appliance) at the customer's site. The maximum distance that the supporting structure plus appliance can be pulled out is 0.5 m. The lengths of the supply cables and pipes must accommodate the range of movement allowed by the retaining device. When moving the assembly, never strain or wheel over the supply cables and pipes.
- It must be possible to lock the wheels on the supporting structure

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.

Materials required

You will need the following materials:

- A suitable part that can be bolted to a permanent fixture at the customer's premises as an anchoring point and to which a suitable retaining mechanism can be fastened.
This may be an eyebolt, for instance, which is bolted into a wall plug in a hole drilled into the building wall behind the combi oven.
The part bolted onto the customer's building must be able to withstand the tensile stresses that can arise from the weight of the assembly and the forces exerted by the operator when moving the combi oven on the wheeled stand.
- A suitable retaining mechanism, which can be connected to the anchoring point and to the stand.
This may be a safety chain with a carabiner catch, for instance.
The retaining mechanism must be able to withstand the tensile stresses that can arise from the weight of the assembly and the forces exerted by the operator when moving the combi oven on the wheeled stand.
The length of the retaining mechanism must be chosen in conjunction with the positions of the anchoring point and the fixing point on the stand such that the combi oven cannot move further than 0.5 m maximum.

Requirements

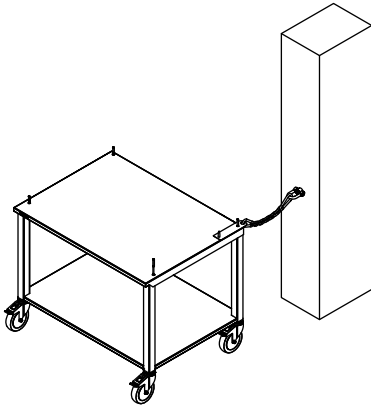
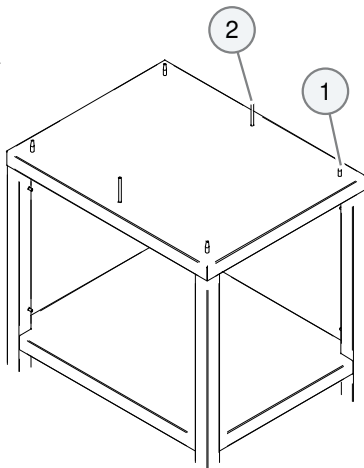
The anchoring point must be installed on the customer's building before setting up the stand on castors.

The position of the anchoring point must be chosen in conjunction with the length of the retaining mechanism and the fixing point on the assembly such that the combi oven cannot move further than 0.5 m maximum.

Ideally, the anchoring point is located directly behind, and at the same height as, the fixing point on the stand.

Setting up the appliance on a wheeled stand

When setting up the appliance on a wheeled oven stand, follow the steps below:

Step	Action	Illustration
1	Position the wheeled oven stand in the installation location and level it so that the absolute tilt of the appliance in operation does not exceed 2° (3.5%).	
2	Lock the parking brakes on the stand.	
3	Connect the retaining device, which restricts the degree of movement of the wheeled stand.	
4	Position the appliance on the stand. To do this, locate the appliance feet in the receptacles (1) on the stand.	
5	Screw the appliance onto the stand using the screws supplied (2).	

5.9 Setting up the appliance on the floor (6.10 mini 2in1)

⚠ Rules for setting up the appliance safely

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

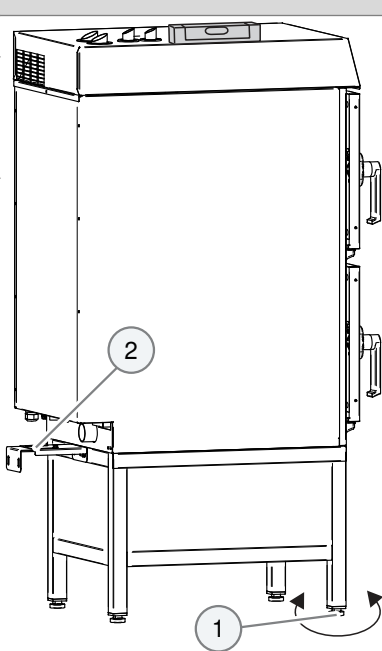
- The stand for the appliance must be fixed so that it cannot tip over when subject to a one-sided load - e.g. appliance door is open.
- It must be possible to set up the stand in the installation position so that it cannot tip over or slide about. The subfloor must satisfy relevant requirements.

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 with wall bracket

When setting up the appliance on the floor, follow the steps below:

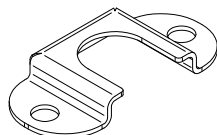
Step	Action	Illustration
1	Position the appliance on the floor.	
2	Ensure the appliance is horizontal by adjusting the height of the feet (1). Use a spirit level to ensure the unit is horizontal in all directions.	
3	Use the wall bracket (2) to fix the appliance so that it cannot tip over.	

Installing appliance with floor attachment

If it not possible to fix the appliance to the wall, the appliance 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:



5.10 Fitting appliance to the wall

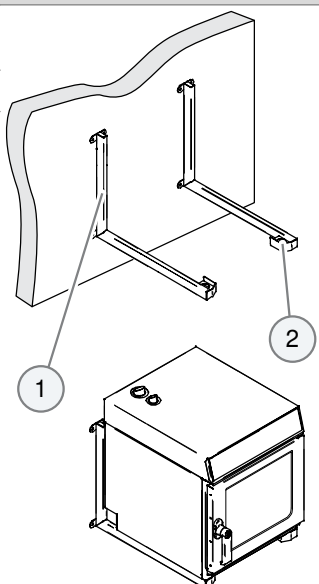
⚠ Rules for setting up the appliance safely

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.

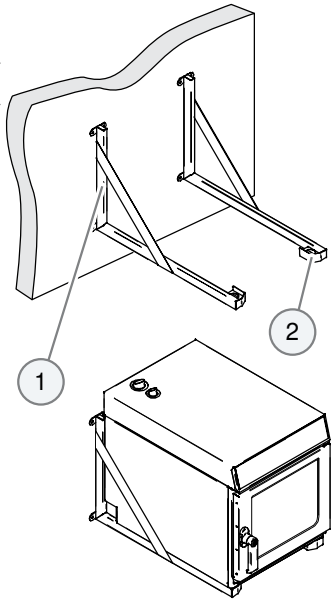
Fitting appliance to wall with wall bracket (6.06 mini)

When fixing the appliance using the wall bracket, follow the steps below:

Step	Action	Illustration
1	Fix the wall bracket (1) to the wall using the enclosed screws.	
2	Lift the appliance into the wall bracket.	
3	Locate and engage the appliance feet in the receptacles (2) on the wall bracket.	

Fitting appliance to wall with wall bracket (6.10 mini)

When fixing the appliance using the wall bracket, follow the steps below:

Step	Action	Illustration
1	Fix the wall bracket (1) to the wall using the enclosed screws.	
2	Lift the appliance into the wall bracket.	
3	Locate and engage the appliance feet in the receptacles (2) on the wall bracket.	

5.11 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.

5.12 Installing appliances in a wheeled stacking kit

Rules for installing the appliances safely in the wheeled 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.
- For appliances on a wheeled supporting structure, a retaining device must be connected to limit the range of movement of the assembly (supporting structure plus appliance) at the customer's site. The maximum distance that the supporting structure plus appliance can be pulled out is 0.5 m. The lengths of the supply cables and pipes must accommodate the range of movement allowed by the retaining device. When moving the assembly, never strain or wheel over the supply cables and pipes.
- It must be possible to lock the wheels on the supporting structure

Installing the appliances in the stacking kit

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

6 Installation

Purpose of this chapter

This chapter explains how to connect your combi oven.

6.1 Electrical installation

Purpose of this section

This section shows you how to perform the electrical installation.

6.1.1 Safe working during electrical installation

For your safety

Before starting work, familiarize yourself with the hazards described in Hazards and safety precautions during installation on page 25.

Owner/operator obligations - 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.

Owner/operator obligations - 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 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.

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.

Appliance certification

The appliance is certified to EN60335-2-42 for fixed connection.

Personal protective equipment

Wear the personal protective equipment specified in the section 'Personal protective equipment' on page 39 of the 'For your safety' chapter for the relevant tasks.

Live parts



Risk of electric shock from live parts

When the cover is open, there is a risk of electric shock from touching live parts.

- ▷ Make sure that any work on the electrical system is performed solely by a qualified electrician from an authorized customer service office.
- ▷ Make sure that the appliance is disconnected from the power supply before removing the covers.
- ▷ Take protective measures to ensure the appliance cannot be switched on again.
- ▷ Before putting the appliance into service, make sure that the electrical connections are intact and connected securely and that the stipulated electrical tests have been carried out and passed.

6.1.2 Planning the electrical installation

Meaning

It is crucial to safe and reliable operation of the appliance that the electrical installation is implemented correctly and professionally. 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 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 equipotential bonding system in accordance with the recognized codes of practice.
- The lengths of the power supply cable and the flexible cable conduit must accommodate the range of movement allowed to the appliance by the retaining device of the wheeled platform. When moving the assembly (platform plus appliance), never strain or wheel over the mains supply cable. This also applies to any other electrical cables between the combi oven and optional equipment such as the signal tower.
- All electrical leads and connections must be checked when the appliance is put into service to ensure cable routing and connections are made correctly in accordance with the recognized codes of practice.

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	Regulations
Fuse	Short-circuit & overload protection and connection of the appliance must comply with local regulations and national installation requirements.
Equipotential bonding	The appliance must be incorporated in an 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 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)	A type B residual-current device (RCD) must be installed before the power-supply connection to the appliance if this is specified in national regulations. This residual-current device must not be used to protect any other appliances.
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.

Regular tests and operational leakage current values

It is compulsory to test the appliance regularly in accordance with the recognized codes of practice. Calibrated meters must be used for the electrical testing in order to perform the stipulated measurements of protective conductor resistance, insulation resistance, protective conductor current / leakage current (see also Individual electrical test on page 86 in the chapter 'Putting into service').

The values measured in these compulsory regular tests must be compared and assessed against the operational leakage current values specified by the manufacturer. The leakage current values are listed under Technical data on page 92 in the 'Electrical connected load ratings' table.

6.1.3 Carrying out the electrical installation

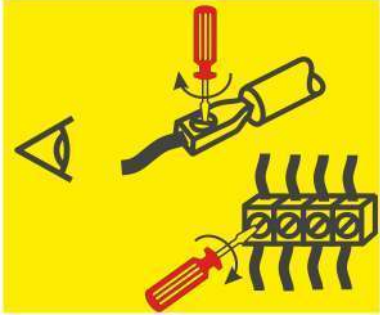
Requirements

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.

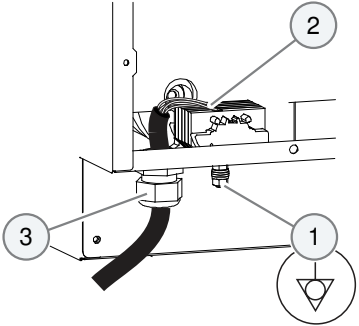
Checking the supply ratings and electrical connections

Follow the steps below to check the connection to the installation system and the electrical connections:

Step	Action	Illustration
1	Remove the rear panel from the appliance. The circuit diagram and spare parts list are located in the wiring compartment.	
2	Check that the electrical supply ratings on the type plate match the figures for the installation system and those given in the circuit diagram. It is only permitted to connect the combi oven if all these values tally with each other.	
3	Check all screw connections and terminals on the appliance. The connections may have worked loose during transport.	

Carrying out the electrical installation

Follow the steps below to connect your appliance to the electrical supply:

Step	Action	Illustration
1	Connect the appliance at the designated connection point (1) to an equipotential bonding system.	
2	Use the mains power cord to connect the power supply to the appliance at the -X10 terminal strip (2).	
3	Make sure that the cable gland (3) is tightened firmly because it also acts as a cable strain relief.	
4	Reset the thermal cutout if necessary.	
5	Fit the rear panel on the appliance and check that it is fixed correctly in place.	

6.1.4 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)

Follow the steps below to convert the appliance to a single-phase supply:

Step	Action	Illustration
1	Insert the jumper as shown in the circuit diagram (page 2).	
2	Stick the relevant label on the type plate.	1N~ 230V 50/60 Hz 3,0kW 13,1A
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

The following table shows the Injection Times operating parameters for different supply ratings:

ID	Description	3N~ 400V 50/60Hz (3/N/PE)	1N~ 230V 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

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

Objective

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

Follow the steps below to convert the appliance to the three-phase supply:

Step	Action	Illustration
1	Insert the jumper as shown in the circuit diagram (page 2).	
2	Stick the relevant label on the type plate.	6.06 mini: 3~ 230V 50/60 Hz 5,7kW 23,5A 6.10 mini: 3~ 230V 50/60 Hz 7,1kW 28,5A

6.2 Water connection

Purpose of this section

This section shows you how to install the water connection.

6.2.1 Safe working when making the water connection

For your safety

Before starting work, familiarize yourself with the hazards described in Hazards and safety precautions during installation on page 25.

Eligibility of personnel for the water connection

Only qualified personnel from an approved customer service office are permitted to connect the combi oven to the water supply.

Personal protective equipment

Wear the personal protective equipment specified in the section 'Personal protective equipment' on page 39 of the 'For your safety' chapter for the relevant tasks.

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 NSK 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:

The water pipes must be installed in compliance with AS/NZS 3500 Plumbing and Drainage Code.

Australia only:

The double check valve supplied with this appliance must be installed in the water supply line to this appliance to provide the backflow prevention required by the Plumbing Code of Australia.

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).

6.2.2 Water supply

⚠ Rules for safe installation of the water supply

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

- For appliances with a wheeled platform, the water supply must be provided via a flexible water supply line.
- The length of the water connection must accommodate the range of movement allowed to the appliance by the retaining device on the wheeled platform. When moving the assembly (platform plus appliance), never strain or wheel over the water supply pipe.

Connecting the water supply

The combi oven is designed to be fixed connected to the customer's water supply. Dirt filters must be provided.

Connecting the water supply with a flexible connecting pipe

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.

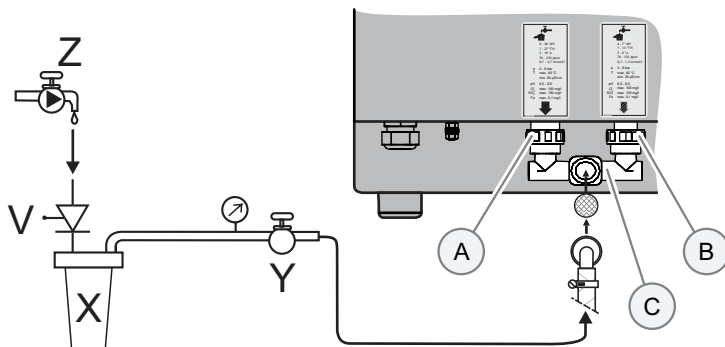
Water quality and water hardness

Check the water quality as specified in Testing the water quality on page 75.

Compare the water quality and water hardness of the in-house supply with the values specified in the 'Technical Data' chapter (see Water quality on page 94). If the specified conditions are not satisfied, you must install suitable water filters and water treatment equipment. Please refer to the Technical Data and Connection Drawing on page 92 section for details of the required capacities.

Installation diagram without water treatment (6.06/6.10/10.10 mini)

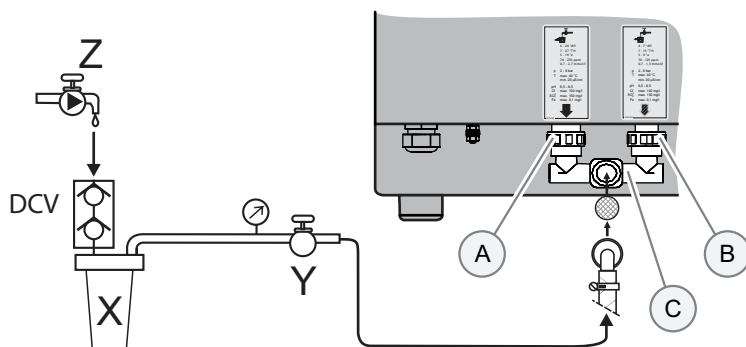
The following diagram shows the connection diagram for water installations without water treatment:



Item	Name	Explanation
A	Soft water connection	Drinking water quality, see Technical data on page 92
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

Installation diagram without water treatment (6.06/6.10/10.10 mini for Australia / New Zealand)

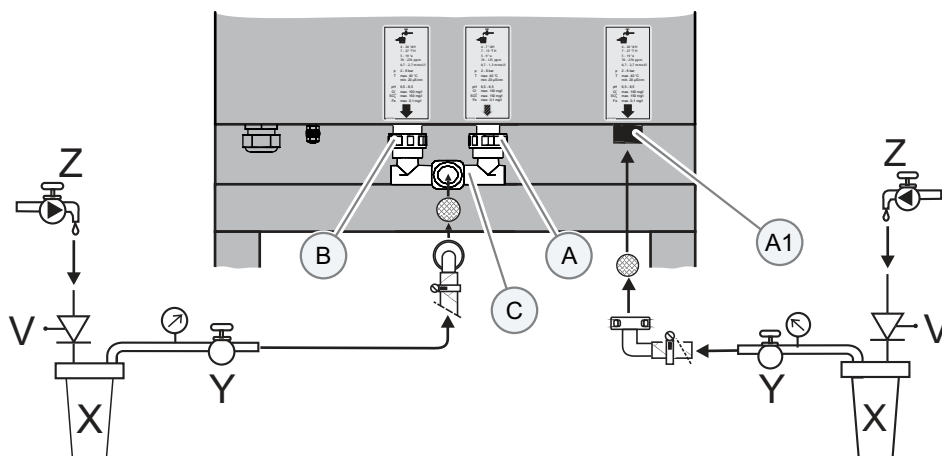
The following diagram shows the connection diagram for water installations without water treatment:



Item	Name	Explanation
A	Soft water connection	Drinking water quality, see Technical data on page 92
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	
DCV	Double check valve	Australian regulations for sanitary installations require this component to be fitted in front of any installed filtration or treatment devices.

Installation diagram without water treatment (6.10 mini 2in1)

The following diagram shows the connection diagram for water installations without water treatment:



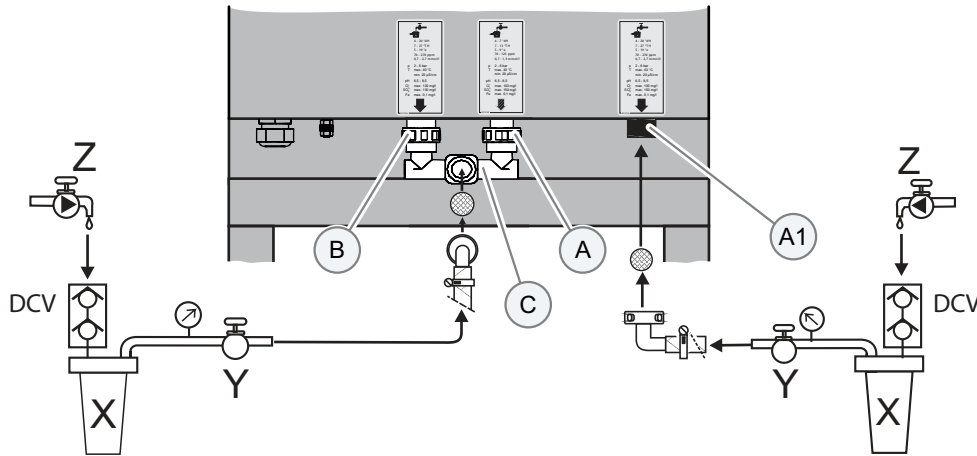
Item	Name	Explanation
A	Soft water connection	Drinking water quality, see Technical data on page 92
A1	Cleaning water connection	
B	Cold water connection	
C	Water distributor	
Z	Water supply line	
X	0.08 mm sediment filter	A 0.08 mm sediment filter must be installed if the water has a high level of impurity.

Y Shut-off device with dirt filter

V Verifiable check valve Type EA

Installation diagram without water treatment (6.10 mini 2in1 for Australia / New Zealand)

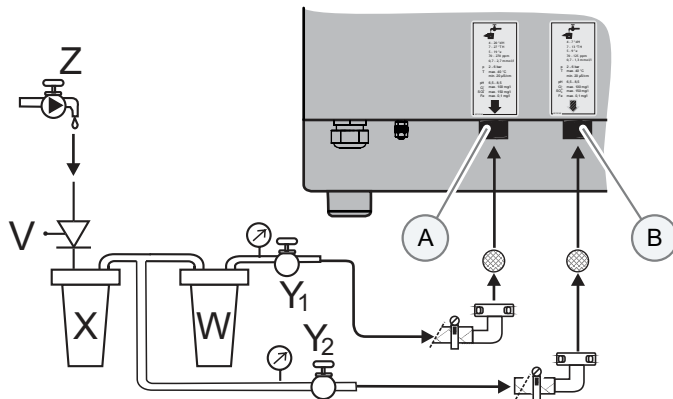
The following diagram shows the connection diagram for water installations without water treatment:



Item	Name	Explanation
A	Soft water connection	Drinking water quality, see Technical data on page 92
A1	Cleaning water connection	
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	
DCV	Double check valve	Australian regulations for sanitary installations require this component to be fitted in front of any installed filtration or treatment devices.

Installation diagram with water treatment (6.06/6.10/10.10 mini)

The following diagram shows the connection diagram for water installations with water treatment:

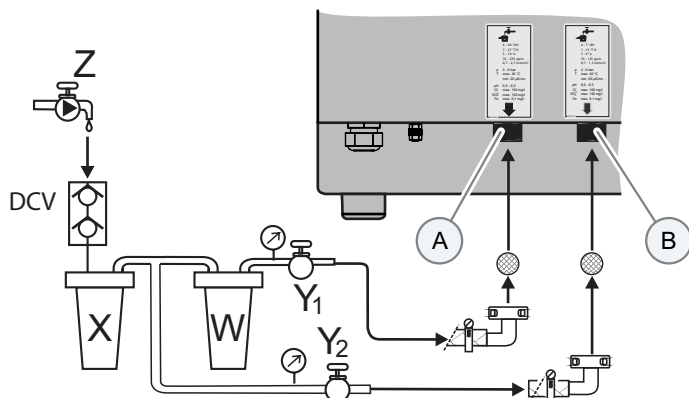


Item	Name	Explanation
A	Soft water connection	Drinking water quality, see Technical data on page 92
B	Cold water connection	

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

Installation diagram with water treatment (6.06/6.10/10.10 mini for Australia / New Zealand)

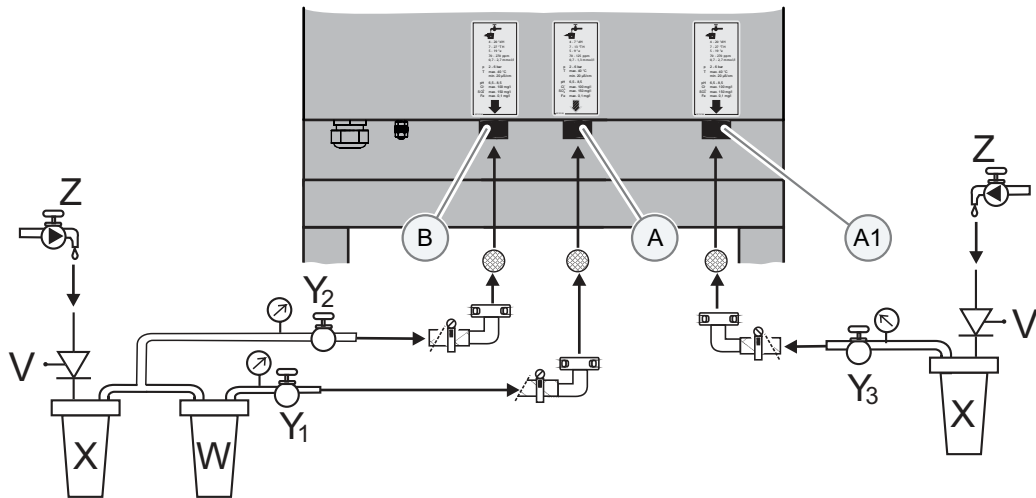
The following diagram shows the connection diagram for water installations with water treatment:



Item	Name	Explanation
A	Soft water connection	Drinking water quality, see Technical data on page 92
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	
DCV	Double check valve	Australian regulations for sanitary installations require this component to be fitted in front of any installed filtration or treatment devices.

Installation diagram with water treatment (6.10 mini 2in1)

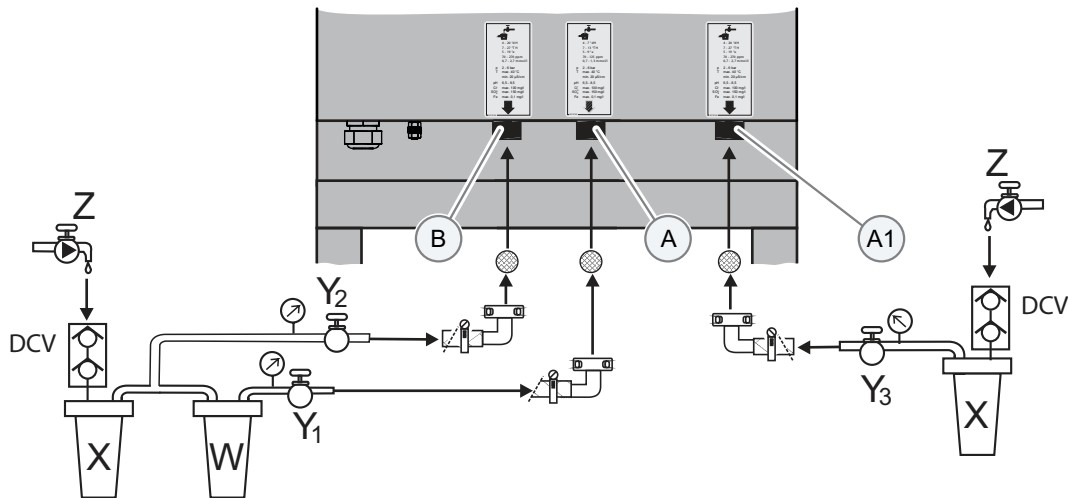
The following diagram shows the connection diagram for water installations with water treatment:



Item	Name	Explanation
A	Soft water connection	Drinking water quality, see Technical data on page 92
A1	Cleaning water connection	
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

Installation diagram with water treatment (6.10 mini 2in1 for Australia / New Zealand)

The following diagram shows the connection diagram for water installations with water treatment:



Item	Name	Explanation
A	Soft water connection	Drinking water quality, see Technical data on page 92
A1	Cleaning water connection	

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	
DCV	Double check valve	Australian regulations for sanitary installations require this component to be fitted in front of any installed filtration or treatment devices.

Installing the water supply

Follow the steps below to provide the water supply to your combi oven:

Step	Action
1	Find out the water quality and water hardness from your local water supply company. If necessary, provide suitable water treatment measures. Information on the required fresh water quality are given in the Technical Data on page 92 chapter.
2	Flush through the customer's water supply pipe.
3	Install the required water filters and water treatment equipment.
4	Fit a separate shut-off device with dirt filter for each appliance.
5	Install in the water supply the double check valve supplied with the appliance (for Australia / New Zealand).
6	Connect the appliance as shown in the connection drawing.
7	Inform the user of the service intervals for the filters and water treatment equipment.
8	Flush out the filter system.
9	Once the water supply has been installed, close the shut-off device.

6.2.3 Test the water quality

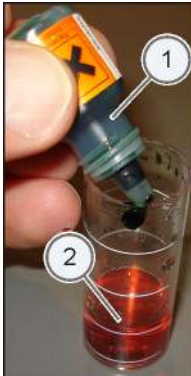
Materials required

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)
- Wrench for unscrewing the catches on the suction panel
- Personal protective equipment: Protective gloves

Test the water quality

Follow the steps below to check the water quality of the cold water and soft water:

Step	Action	Illustration / Further details ...												
1	Measure the ppm or the conductivity. $1\mu\text{S}/\text{cm} = 0.6 \text{ ppm}$ (physical assumption)													
2	Measure the general hardness (GH). Pour 5ml of sampled water into an analysis container for each water type. One drop of the analysis fluid is equivalent to 1°dH.	 5ml !! ▲ 1°dH (GH) ▲ 2°dH (GH) etc 3												
<table border="1"> <thead> <tr> <th>No.</th><th>Test time</th><th>Color of test solution</th></tr> </thead> <tbody> <tr> <td>1</td><td>Analysis liquid</td><td>Green</td></tr> <tr> <td>2</td><td>Start of test</td><td>Colorless / orange</td></tr> <tr> <td>3</td><td>End of test</td><td>Green</td></tr> </tbody> </table>		No.	Test time	Color of test solution	1	Analysis liquid	Green	2	Start of test	Colorless / orange	3	End of test	Green	
No.	Test time	Color of test solution												
1	Analysis liquid	Green												
2	Start of test	Colorless / orange												
3	End of test	Green												
3	Measure the carbonate hardness (KH). Pour 5ml of sampled water into an analysis container for each water type. One drop of the analysis fluid is equivalent to 1°dH.	 5ml !! ▲ 1°dH (KH) ▲ 2°dH (KH) etc 3												
<table border="1"> <thead> <tr> <th>No.</th><th>Test time</th><th>Color of test solution</th></tr> </thead> <tbody> <tr> <td>1</td><td>Analysis liquid</td><td>Orange</td></tr> <tr> <td>2</td><td>Start of test</td><td>Colorless / purple</td></tr> <tr> <td>3</td><td>End of test</td><td>Orange</td></tr> </tbody> </table>		No.	Test time	Color of test solution	1	Analysis liquid	Orange	2	Start of test	Colorless / purple	3	End of test	Orange	
No.	Test time	Color of test solution												
1	Analysis liquid	Orange												
2	Start of test	Colorless / purple												
3	End of test	Orange												
4	Analyze the result. The measurements must lie within the target range.	Requirements relating to the water quality on page 94												

6.2.4 Water drain

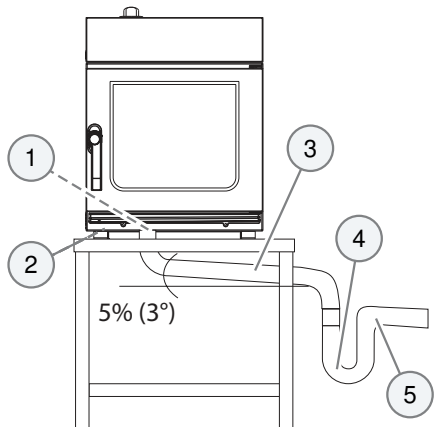
⚠ Rules for safe installation of the drain connection

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 drain pipe must have a minimum slope of 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. For appliances with a wheeled supporting structure, the drain pipe in a permanently connected system must be disconnected before the appliance can be moved with the supporting structure.

Connection diagram (6.06/6.10/10.10 mini)

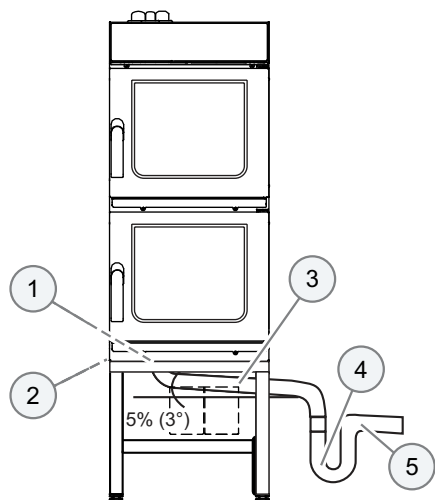
The following diagram shows the connection diagram for installing the drain as a fixed connection:



Item	Meaning	Explanation
1	Drain connection	▪ On the rear of the combi oven, connection drawing: point C
2	Safety overflow	▪ Underneath the combi oven, connection drawing: point M ▪ Used to drain away water in the event of a fault (blockage).
3	Waste pipe DN 40	▪ Minimum internal diameter = 36 mm ▪ Slope 5% (3°)
4	Waste trap / Funnel waste trap	▪ Blocks smells
5	Drain pipe DN 40	▪ Minimum internal diameter = 36 mm ▪ Slope 5% (3°)

Connection diagram (6.10 mini 2in1)

The following diagram shows the drain installation system:



Item	Meaning	Explanation
1	Drain connection	On the rear of the combi oven, connection drawing: point C
2	Safety overflow	- Underneath the combi oven, connection drawing: point M - Used to drain away water in the event of a fault (blockage).
3	Waste pipe DN 50	- Minimum internal diameter = 46 mm - Slope 5% (3°)
4	Waste trap / Funnel waste trap	Blocks smells
5	Drain pipe DN 50	- Minimum internal diameter = 46 mm - Slope 5% (3°)

Fitting the drain connection

Follow the steps below to provide the water drain for your combi oven:

Step	Action
1	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 operating parameter

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

6.3 Installing the ConvoClean system

Purpose of this section

This section shows you how to install the ConvoClean fully automatic oven cleaning system.

6.3.1 Safe working when installing the ConvoClean system

For your safety

Before starting work, familiarize yourself with the hazards described in Hazards and safety precautions during installation on page 25.

Eligibility of personnel for installing the ConvoClean system

Only skilled personnel from an authorized customer service office are permitted to connect the appliance.

Personal protective equipment

Wear the personal protective equipment specified in the section 'Personal protective equipment' on page 39 of the 'For your safety' chapter for the relevant tasks.

Contact with cleaning agents

WARNING

Risk of chemical burns or irritation to skin, eyes and respiratory system.

Direct contact with the ConvoClean new cleaning agent or ConvoCare rinse aid will irritate the skin, eyes and respiratory system. Direct contact with the ConvoClean forte cleaning agent will result in chemical burns to the skin, eyes and respiratory organs.

- ▷ Do not inhale the vapours or spray mist from the cleaning agent and rinse aid.
- ▷ Do not let the cleaning agent or rinse aid come into contact with skin, eyes or mucous membranes.
- ▷ Follow the guidance on the cleaning-fluid labels and in the relevant data sheets when using the cleaning agents.
- ▷ Wear personal protective equipment.

6.3.2 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.

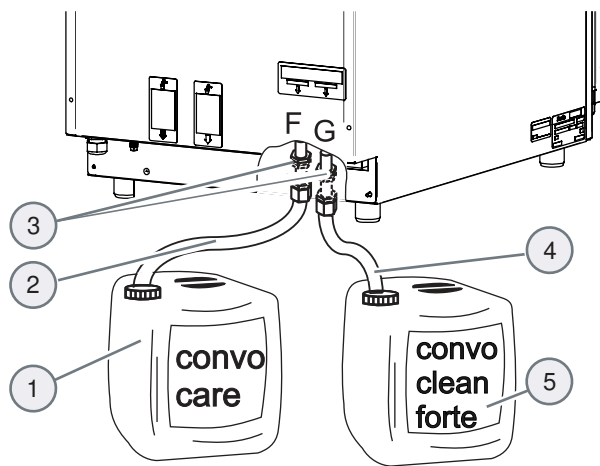
NOTICE Damage caused as a result of improper use of cleaning agents will invalidate any warranty claims.

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 system (6.06/6.10/10.10 mini)

The following diagram shows the layout of the fully automatic oven cleaning system:



No.	Name	Color coding
1	ConvoCare rinse aid canister	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	ConvoClean forte cleaning agent canister	red (label)
F	Appliance connector for rinse aid supply	green (lettering)
G	Appliance connector for cleaning agent supply	red (lettering)

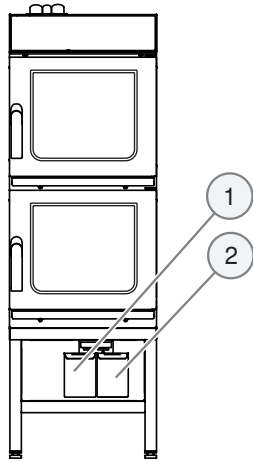
Installation location for the cleaning-agent and rinse aid canisters (6.06/6.10/10.10 mini)

Install the canisters as follows:

- The canisters should be located for easy access beside the appliance on a flat surface.
- The canisters must not be positioned above the level of the surface on which the appliance stands.
- The level of the surface on which the canisters stand must not lie more than 1 m below the tube connections on the appliance.

Layout of the fully automatic oven cleaning system (6.10 mini 2in1)

The following diagram shows the layout of the fully automatic oven cleaning system:



No.	Name
1	Drawer for ConvoCare rinse aid
2	Drawer for ConvoClean forte cleaning agent

6.3.3 Connecting the fully automatic oven cleaning system (6.06/6.10/10.10 mini)

⚠ 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

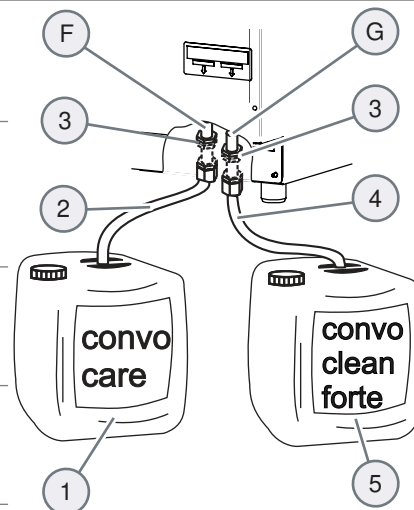
Check that the following requirements have been met:

- Cold water supply connected as specified in the Water supply on page 69 section
- Drain connected as specified in the Water drain on page 76 section
- Technical figures comply with requirements given in the Technical data on page 92 section

Connecting the fully automatic oven cleaning system

Follow the steps below to connect the ConvoClean system:

Step	Action
1	Mix the supplied ConvoCare K concentrate with soft water in the empty ConvoCare canister. Follow the instructions in the user manual on mixing the ConvoCare solution.
2	Plug the red extractor tube (4) for the cleaning agent onto the connector nipple of the outer tube fitting (G) and hold in place with the wire clip (3) (see label for cleaning agent connection on the rear panel of the appliance).
3	Plug the green extractor tube (2) for the rinse aid onto the connector nipple of the inner tube fitting (F) and hold in place with the wire clip (3) (see label for rinse aid connection on the rear panel of the appliance).
4	Plug the suction nozzle on the red extractor tube into the canister of ConvoClean forte (5). There must be no kinks in the tube and the vent hole in the canister must be open and unblocked.
5	Plug the suction nozzle on the green extractor tube into the canister of ConvoCare (1). There must be no kinks in the tube and the vent hole in the canister must be open and unblocked.
6	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).

6.3.4 Preparing the fully automatic oven cleaning system (6.10 mini 2in1)

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

If ConvoClean and ConvoCare are swapped over, there is a health risk from eating the cooked dishes. Observe the following rules to prevent these hazards:

- When filling the cleaning agent drawers with ConvoClean forte and ConvoCare, take great care to ensure that the cleaning product is added to the correct drawer.

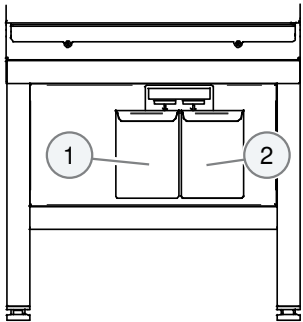
Requirements

Check that the following requirements have been met:

- Cleaning water supply connected as specified in the Water supply on page 69 section
- Drain connected as specified in the Water drain on page 76 section
- Technical figures comply with requirements given in the Technical data on page 92 section

Preparing the fully automatic oven cleaning system

Follow the steps below to prepare the ConvoClean system:

Step	Action	
1	Mix the supplied ConvoCare concentrate with soft water in the empty ConvoCare canister. Follow the instructions in the user manual on mixing the ConvoCare solution.	
2	Fill the rinse aid drawer (1) with rinse aid and the cleaning-agent drawer (2) with cleaning agent in accordance with the drawer labelling.	
3	Start level 1 cleaning in cooking chamber 1, and check that the cleaning agent is injected into cooking chamber 1.	
4	Start level 1 cleaning in cooking chamber 2, and check that the cleaning agent is injected into cooking chamber 2.	

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

Purpose of this chapter

This chapter explains how to prepare your combi oven for first-time use, how to take it out of service and how to dispose of it properly.

7.1 Safe working when putting the appliance into service

For your safety when putting the appliance into service

Before starting work, make sure that you are familiar with the hazards described under 'Hazards and safety precautions when putting the appliance into service' on page 27 and in the chapter 'For your safety' in the user manual.

Eligibility of personnel for putting the appliance into service

Work performed on the appliance while preparing it for use is performed in special operating circumstances (e.g. with safety covers removed) or includes activities that require personnel to have relevant qualifications and appliance-specific knowledge that exceed the requirements for operating personnel.

The following requirements must be met by personnel:

- Personnel are employees of an authorized customer service company.
- Personnel have relevant training as a service engineer.
- Personnel have training specific to the appliance.
- In particular, personnel must be able to assess whether the electrical and water supplies and the wastewater system have been connected to the appliance correctly.

Owner/operator obligations - 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 Convothem 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.

Owner/operator obligations - 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 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.

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.

Basic rules for safe operation

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 (with the Convo-Clean system option, also for cleaning agent) 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 17 are met.
- The 'Requirements relating to the operating environment of the combi oven' on page 17 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:

- **For 6.06/6.10/10.10 mini:** The air vent and the ventilation port on the top of the appliance, the ventilation slots on the rear of the appliance and the gap on the front of the appliance between the feet must not be covered, obstructed or blocked.
- **For 6.10 mini 2in1:** The air vent on the top of the appliance, the ventilation slots on the rear of the appliance and the ventilation slots in the appliance floor 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.

Additional rules for safe operation of the appliance on a mobile supporting structure (6.06/6.10/10.10 mini)

To avoid hazards, the following rules must be observed when operating appliances positioned on a wheeled supporting structure:

- The retaining device for restricting the range of movement of the assembly (supporting structure plus appliance) must be connected at all times.
Check every day before use that the retaining device is connected.
- The parking brakes on the front wheels must always be engaged when operating the appliances.
- Check that the wheel brakes are on before operation each day.

Personal protective equipment

Wear the personal protective equipment specified in the section 'Personal protective equipment' on page 39 of the 'For your safety' chapter for the relevant tasks.

Live parts



Risk of electric shock from live parts

When the cover is open, there is a risk of electric shock from touching live parts.

- ▷ Make sure that any work on the electrical system is performed solely by a qualified electrician from an authorized customer service office.
- ▷ Make sure that the appliance is disconnected from the power supply before removing the covers.
- ▷ Take protective measures to ensure the appliance cannot be switched on again.
- ▷ Before putting the appliance into service, make sure that the electrical connections are intact and connected securely and that the stipulated electrical tests have been carried out and passed.

Hot surfaces

WARNING

Risk of burns from high temperatures inside the cooking chamber and on the inside of the appliance door

You may get burnt if you touch any of the interior parts of the cooking chamber, the inside of the appliance door or any parts that were inside the oven during cooking.

- ▷ Wear personal protective equipment.

Hot steam / vapour

CAUTION

Risk of scalding from hot steam and vapour

Escaping hot steam and vapour can cause scalding to face, hands, feet and legs.

- ▷ Open the appliance door as specified in the instructions for safe opening. Never put your head inside the cooking chamber.
- ▷ With the safety catch option, always use the venting position when opening the appliance door.
- ▷ When you are cooling the cooking chamber using the Cool down function with the appliance door open, step back from the appliance to avoid the hot escaping steam and vapour (Cool down option).
- ▷ If you open the appliance door while you are using the Cool down function to cool the cooking chamber, expect to face a strong blast of hot steam and vapour (Cool down option).

Contact with cleaning agents

WARNING

Risk of chemical burns or irritation to skin, eyes and respiratory system.

Direct contact with the ConvoClean new cleaning agent or ConvoCare rinse aid will irritate the skin, eyes and respiratory system. Direct contact with the ConvoClean forte cleaning agent will result in chemical burns to the skin, eyes and respiratory organs.

- ▷ Do not inhale the vapours or spray mist from the cleaning agent and rinse aid.
- ▷ Do not let the cleaning agent or rinse aid come into contact with skin, eyes or mucous membranes.
- ▷ Do not spray cleaning agent or rinse aid into a cooking chamber that is at a temperature of higher than 60 °C, because this will increase the caustic and irritating vapours given off by the cleaning fluid.
- ▷ Wear personal protective equipment.
- ▷ **For 6.10 mini 2in1:** Close the cleaning agent drawer carefully without jolting to avoid any cleaning agent slopping out.

7.2 Procedure for putting the appliance into service

Meaning

This section is intended for personnel who will prepare the appliance for first-time use. It summarizes what requirements must be met prior to putting the combi oven into use, and describes the procedure for preparing the appliance.

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 42).
- 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 60.

Use the checklist for moving, setting up and installing the appliance on page 100 to carry out these checks.

- 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.

Use the Safety devices and warnings checklist on page 102 to carry out these checks.

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.

Putting into service (6.06/6.10/10.10 mini)

To prepare the combi oven for first-time use, follow the steps below:

Step	Action	More on this ...
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: ▪ Suction panel ▪ Racks	See user manual
5	Switch on the combi oven.	See user manual
6	Set the following: ▪ Date ▪ Time ▪ Language	See user manual

Step	Action	More on this ...
7	Select the Combi-steam cooking program: ▪ Set 150 °C and 10 minutes.	See user manual
8	Check the following points: ▪ Is the oven light on? ▪ Is the fan running? ▪ Are there any leaks in the water supply and wastewater systems? ▪ Does the temperature rise inside the cooking chamber?	
9	Select the Steam cooking program: ▪ Set 100 °C and 10 minutes.	See user manual
10	Check whether steam is being generated in the cooking chamber (open door carefully).	
11	Check the ConvoClean fully automatic oven cleaning system (optional): ▪ Start the fully automatic oven cleaning. ▪ Check the supply of ConvoClean forte and Convo-Care.	See user manual

Putting into service (6.10 mini 2in1)

To prepare the combi oven for first-time use, follow the steps below:

Step	Action	More on this ...
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: ▪ Suction panel ▪ Racks	See user manual
5	Switch on the combi oven.	See user manual
6	Set the following: ▪ Date ▪ Time ▪ Language	See user manual
7	Select the Combi-steam cooking program: ▪ Set 150 °C and 10 minutes.	See user manual
8	Check the following points: ▪ Is the oven light on? ▪ Is the fan running? ▪ Are there any leaks in the water supply and wastewater systems? ▪ Does the temperature rise inside the cooking chamber?	
9	Select the Steam cooking program: ▪ Set 100 °C and 10 minutes.	See user manual

Step	Action	More on this ...
10	▪ Check whether steam is being generated in the cooking chamber (open door carefully). ▪ For each cooking chamber, use the pressure gauge to adjust the water supply for the steam generator so that the pressure gage reads 120 kPa (flow pressure 1.2 bar).	
11	Check the ConvoClean fully automatic oven cleaning system: ▪ Start the fully automatic oven cleaning of cooking chamber 1. ▪ Check the supply of ConvoClean forte and Convo-Care to cooking chamber 1.	See user manual

Customer guidance and instruction.

Instruct the user regarding all safety-related functions and devices (see Checklist: customer guidance and instruction). Instruct the user in how to operate the appliance.

8 Removal from service and disposal

Purpose of this chapter

This chapter explains how to take your combi oven out of operation and how to dispose of it properly.

8.1 Safe working when removing the appliance from service

For your safety when removing the appliance from service

Before starting work, familiarize yourself with the hazards described in Hazards and safety precautions when taking the appliance out of service on page 30.

Eligibility of personnel for removing the appliance from service

Work performed on the appliance while taking it out of service is performed in special operating circumstances (e.g. with safety covers removed) or includes activities that require personnel to have relevant qualifications and appliance-specific knowledge that exceed the requirements for operating personnel.

The following requirements must be met by personnel:

- Personnel are employees of an authorized customer service company.
- Personnel have relevant training as a service engineer.
- Personnel have training specific to the appliance.
- In particular, personnel must be able to assess whether the electrical supply and water supply have been connected to the appliance correctly.

Owner/operator obligations - 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 Convothem 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.

Owner/operator obligations - 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 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.

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.

Personal protective equipment

Wear the personal protective equipment specified in the section 'Personal protective equipment' on page 39 of the 'For your safety' chapter for the relevant tasks.

Live parts

DANGER

Risk of electric shock from live parts and loose cables

When the cover is open, there is a risk of electric shock from touching live parts.

- ▷ Make sure that any work on the electrical system is performed solely by a qualified electrician from an authorized customer service office.
- ▷ Make sure that the appliance is disconnected from the power supply before removing the covers.
- ▷ Take protective measures to ensure the appliance cannot be switched on again.

Moving heavy loads

WARNING

Risk of injury from lifting incorrectly

When lifting the appliance, the weight of the appliance may lead to injuries, especially in the area of the torso.

- ▷ Use a fork-lift truck/pallet truck or suitable lifting gear to move the appliance.
- ▷ When lifting the appliance, use enough people for the weight of the appliance (guide value: 15 to 55 kg max., depending on age and gender). Observe the local occupational safety regulations.
- ▷ Wear personal protective equipment.

Unsuitable supporting surface

WARNING

Risk of crushing if the appliance tips over or falls off

Body parts can be crushed if the appliance tips over or falls off.

- ▷ Make sure that the appliance is never placed on an unsuitable supporting surface.

Contact with cleaning agents

WARNING

Risk of chemical burns or irritation to skin, eyes and respiratory system.

Direct contact with the ConvoClean new cleaning agent or ConvoCare rinse aid will irritate the skin, eyes and respiratory system. Direct contact with the ConvoClean forte cleaning agent will result in chemical burns to the skin, eyes and respiratory organs.

- ▷ Do not inhale the vapours or spray mist from the cleaning agent and rinse aid.
- ▷ Do not let the cleaning agent or rinse aid come into contact with skin, eyes or mucous membranes.
- ▷ Follow the guidance on the cleaning-fluid labels and in the relevant data sheets when using the cleaning agents.
- ▷ Wear personal protective equipment.

8.2 Removal from service and disposal

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 take your combi oven out of service, follow the steps for setting up and installing your appliance in the reverse order (see the chapters Installation on page 60, Moving the appliance on page 40 and Setting up the appliance on page 42).

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
- Disconnecting the cleaning agent and rinse aid connections
- Correct disposal of the cleaning agents in accordance with the EC safety datasheets and as instructed on the labels of the cleaning product containers

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 and Connection drawing

9.1 Technical data

Dimensions and weights

The following table shows appliance dimensions and weights:

		6.06 mini	6.10 mini	10.10 mini	6.10 mini 2in1
Width					
Including packaging	[mm]	580	580	580	800
Excluding packaging	[mm]	515	515	515	515
Depth					
Including packaging	[mm]	740	910	910	935
Excluding packaging	[mm]	599	777	777	802
Height					
Including packaging	[mm]	830	830	1065	1750
Excluding packaging	[mm]	647	647	877	1552
Weight (without ConvoClean system option)					
Including packaging	[kg]	57	67	82	-
Excluding packaging	[kg]	45	54	69	-
Weight (with ConvoClean system option)					
Including packaging	[kg]	58	68	83	135
Excluding packaging	[kg]	46	55	70	119
Safety clearances					
Rear	[mm]	50	50	50	50
Right	[mm]	50	50	50	50
Left (larger gap recommended for servicing)	[mm]	50	50	50	50
Top (for ventilation)	[mm]	500	500	500	500

Dimensions and weights of stand

The following table lists the dimensions of the stand for the combi oven and the overall height including the stand:

Open stand		6.06 mini	6.10 mini	10.10 mini	6.10 mini 2in1
Width	[mm]	515	515	515	515
Depth	[mm]	475	653	653	653
Height	[mm]	900	900	700	455
Weight	[kg]	9.7	12	10.6	9.2
Overall height including stand	[mm]	1577	1577	1577	1552

Maximum permissible loading weight

The following table shows the maximum permissible loading weight per combi oven. Each shelf may only be loaded with a maximum of 5 kg.

Maximum permissible loading weight		6.06 mini	6.10 mini	10.10 mini	6.10 mini 2in1
GN (containers, shelf-grills, baking trays)					
Per combi oven	[kg]	13	20	30	40 (20 kg in each cooking chamber)
Per shelf	[kg]	5	5	5	5

Electrical connected load ratings

The following table shows the electrical connected load ratings:

Electrical connected load ratings		6.06 mini	6.10 mini	10.10 mini	6.10 mini 2in1
3N~ 400 V 50/60 Hz (3/N/PE)					
Rated power consumption	[kW]	5.7	7.1	10.5	14.1
Convection power	[kW]	5.4	6.8	10.2	2 x 6.8
Motor power	[kW]	0.25	0.25	0.25	2 x 0.25
Rated current	[A]	11.8	14.8	15.7	22.0
Fuse rating	[A]	16	16	20	25
Protective conductor current (leakage current)	[mA]	7	7	7	12
Protective earth current (leakage current, for reduced fan speed option)	[mA]	2	2	2	-
Recommended conductor cross-section for wires laid uncovered in air up to 5 m in length.	[mm ²]	5G2.5	5G2.5	5G2.5	5G2.5
3~ 230 V 50/60 Hz (3/PE)					
Rated power consumption	[kW]	5.7	7.1	-	-
Convection power	[kW]	5.4	6.8	-	-
Motor power	[kW]	0.25	0.25	-	-
Rated current	[A]	23.5	18.6	-	-
Fuse rating	[A]	25	35	-	-
Recommended conductor cross-section for wires laid uncovered in air up to 5 m in length.	[mm ²]	4G4	4G4	-	-
1N~ 230 V 50/60 Hz (1/N/PE)					
Rated power consumption	[kW]	3.0	-	-	-
Convection power	[kW]	2.7	-	-	-
Motor power	[kW]	0.25	-	-	-
Rated current	[A]	13.1	-	-	-
Fuse rating	[A]	16	-	-	-
Recommended conductor cross-section for wires laid uncovered in air up to 5 m in length.	[mm ²]	3G2.5	-	-	-

Dissipated heat

The following table shows the heat output figures:

Dissipated heat		6.06 mini	6.10 mini	10.10 mini	6.10 min 2in1
Latent heat	[kJ/h]	1000	1330	1850	3700
	[kW]	0.28	0.37	0.51	1.03
Sensible heat	[kJ/h]	1100	1450	2030	2370
	[kW]	0.31	0.40	0.56	0.69

Water connection

The following table shows the values for the water supply:

Water connection	
Water supply (cold only)	
Shut-off device	With EA (verifiable) check valve and dirt filter For Australia / New Zealand: With double check valve (DCV) and dirt filter
Water supply	
Connection	2 x G 3/4", Fixed connection recommended
Flow pressure (without ConvoClean system option)	[kPa] 200 - 600 kPa (2 - 6 bar)
Flow pressure (with ConvoClean system option)	[kPa] 300 - 600 kPa (3 - 6 bar)
Water drain	
Model	Fixed connection (recommended) or funnel waste trap
Type	For 6.06/6.10/10.10 mini: DN 40 For 6.06 mini 2in1: DN 50

Water quality

The following table shows the values for the 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

Water quality		
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 ⁻ (chloride)	[mg/l]	max. 60
Cl ₂ (free chlorine)	[mg/l]	max. 0.2
SO ₄ ²⁻ (sulphate)	[mg/l]	max. 150
Fe (iron)	[mg/l]	max. 0.1
NH ₂ Cl (monochloramine)	[mg/l]	max. 0.2
Carbonate hardness (KH)	[°dH]	Low GH

Water consumption

The following table shows the water consumption of the combi oven:

Water consumption		6.06 mini	6.10 mini	10.10 mini	6.10 mini 2in1
Cold water (without ConvoClean system option)					
Average water consumption	[l/h]	0 - 15	0 - 15	0 - 15	0 - 15
Peak consumption	[l/min]	0.5	0.5	0.5	1.0
Cold water (with ConvoClean system option)					
Average water consumption	[l/h]	0 - 20	0 - 20	0 - 20	0 - 40
Peak consumption	[l/min]	7	10	10	20
Soft water					
Average water consumption for selecting the size of the water filter	[l/h]	0 - 15	0 - 15	0 - 15	0 - 15

Appliance technical standards

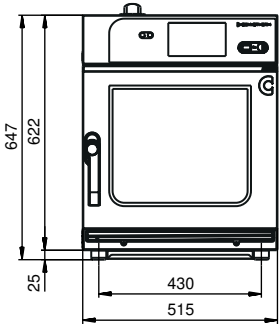
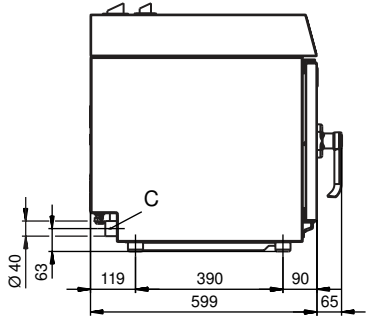
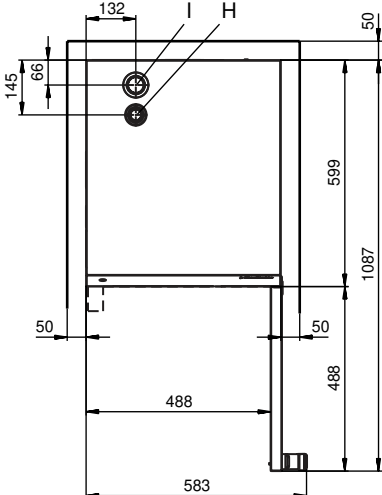
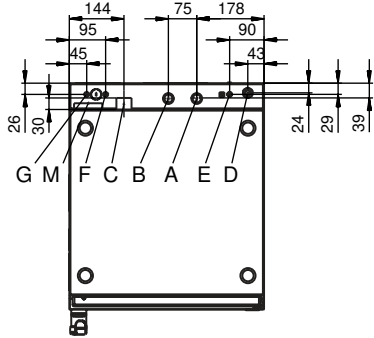
The following table shows the technical standards for the appliance:

Appliance technical standards		
Degree of protection		IPX4
Approval mark according to national regulations		TÜV/GS, DIN GOST TÜV, SVGW
Noise emission		
Measured	[dBA]	max. 60

9.2 Connection drawing for OES 6.06 mini

Dimensions and connection points

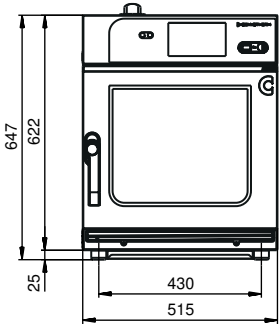
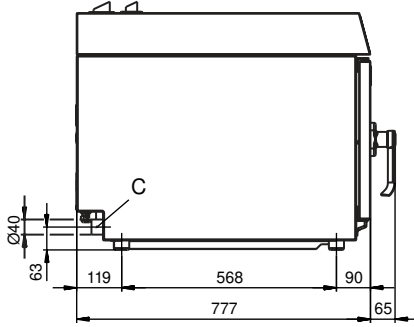
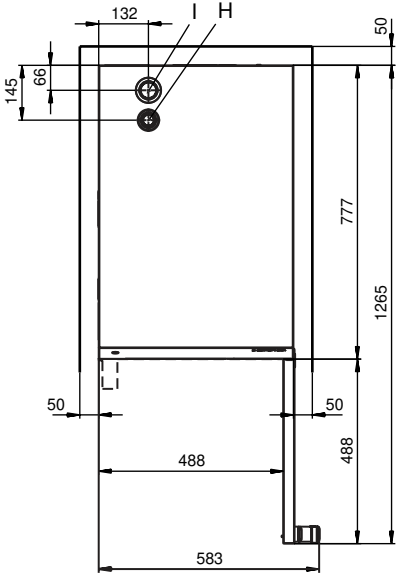
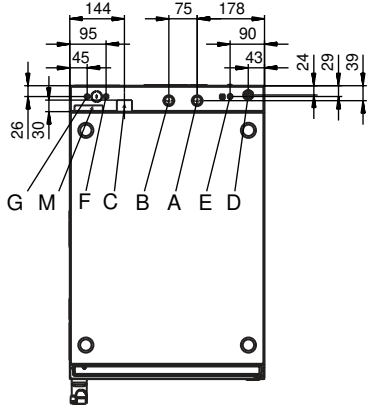
The following table shows the appliance dimensions and connection points:

View	Side view
	
View from above with wall clearances	Connections on the underside
	
Meaning of labelled elements	
A Water connection Soft water G3/4"	F Rinse-aid connection
B Water connection Cold water G3/4"	G Cleaning agent connection
C Drain connection DN 40	H Air vent Ø 30 mm
D Electrical connection	I Ventilation port Ø 43 mm
E Equipotential bonding	M Safety overflow 60 mm x 20 mm

9.3 Connection drawing for OES 6.10 mini

Dimensions and connection points

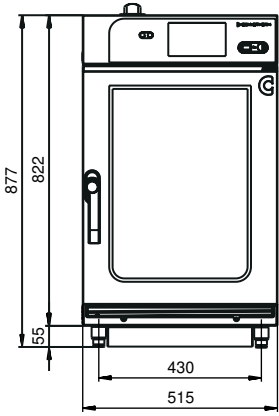
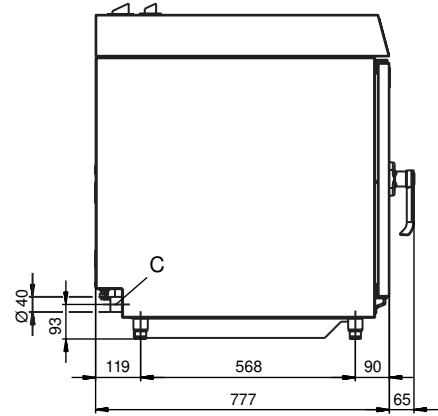
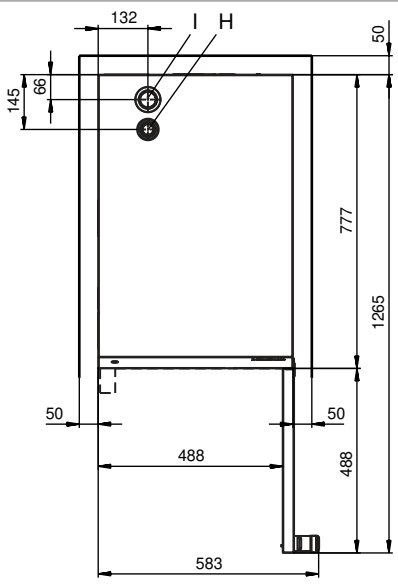
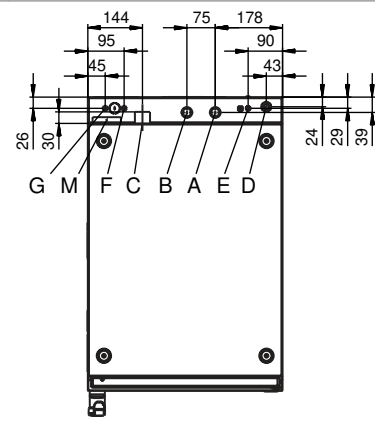
The following table shows the appliance dimensions and connection points:

View	Side view
	
View from above with wall clearances	Connections on the underside
	
Meaning of labelled elements	
A Water connection Soft water G3/4"	F Rinse-aid connection
B Water connection Cold water G3/4"	G Cleaning agent connection
C Drain connection DN 40	H Air vent Ø 30 mm
D Electrical connection	I Ventilation port Ø 43 mm
E Equipotential bonding	M Overflow 60 mm x 20 mm

9.4 Connection drawing for OES 10.10 mini

Dimensions and connection points

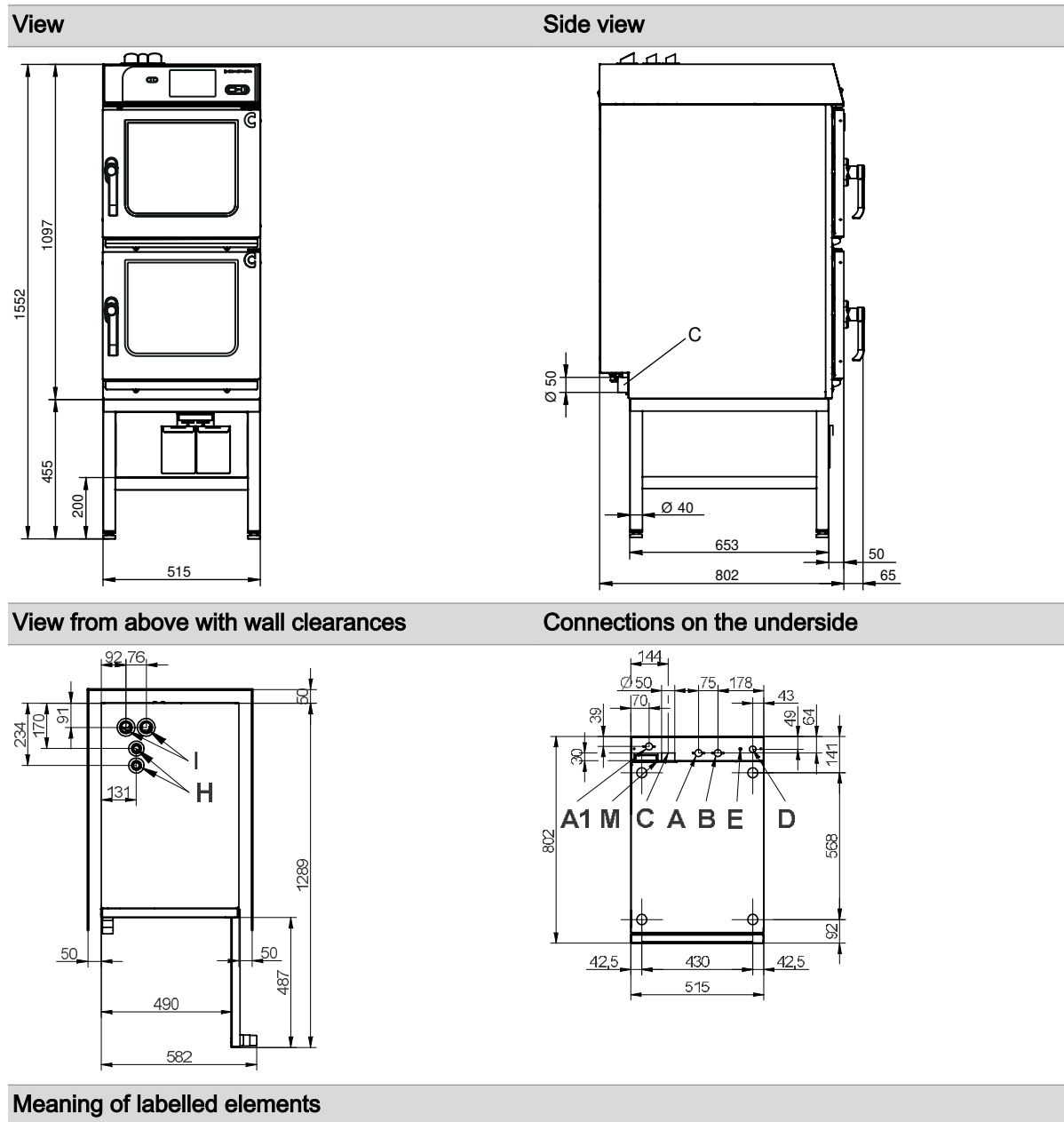
The following table shows the appliance dimensions and connection points:

View	Side view
	
View from above with wall clearances	Connections on the underside
	
Meaning of labelled elements	
A Water connection Soft water G3/4"	F Rinse-aid connection
B Water connection Cold water G3/4"	G Cleaning agent connection
C Drain connection DN 40	H Air vent Ø 30 mm
D Electrical connection	I Ventilation port Ø 43 mm
E Equipotential bonding	M Overflow 60 mm x 20 mm

9.5 Connection drawing for OES 6.10 mini 2in1

Dimensions and connection points

The following table shows the appliance dimensions and connection points:



10 Checklists and completion of installation

Purpose of this chapter

This chapter contains the installation checklists and instructions for the user. The checklists are used to prove that the combi oven has been installed correctly.

10.1 Checklist: moving, setting up and installing the appliance

Target reader

The following checklists are aimed at that person employed by the authorized customer service office who has overall responsibility for preparing the appliance for first-time use (start-up engineer).

Action

As start-up engineer, enter the basic information and check the installation against the following checklists.

Check the box of those conditions that have been satisfied.

Basic information

Enter the basic information below:

Location of installed appliance (address)

Appliance number (as given on type plate)

Part number (as given on type plate)

Checklist

Check whether the following steps have been performed in accordance with requirements, and check the box of those conditions that have been satisfied and the steps that have been carried out.

Transportation	Requirements met
Conveying the appliance to the installation location on page 41	☐
Setting up the appliance	Requirements met
Requirements for the installation location on page 44	☐
Unpacking on page 48	☐
Taking the appliance off the pallet on page 50	☐
Setting up the appliance on a worktable on page 51	☐
Setting up the appliance on a stand on page 52	☐
Setting up the appliance on a wheeled stand on page 53	☐
Setting up the appliance on the floor (6.10 mini 2in1) on page 55	☐
Fitting appliance to the wall on page 56	☐
Mounting the appliances in a stacking kit on page 58	☐

10 Checklists and completion of installation

Installing appliances in a wheeled stacking kit on page 59	☐
Installation	Requirements met
Electrical installation on page 60	☐
Water connection on page 67	☐
Installing the ConvoClean system on page 78	☐

10.2 Checklist: Safety devices and warnings

Safety devices

Inspect the following safety devices. Check the box to confirm that the corresponding safety device is fitted and working properly.

Safety device	Fitted / Working properly
Covers are fitted	☐
Operating panel is fitted	☐
Appliance door has no scratches, cracks or dents	☐
Venting position of appliance door working properly (when safety catch option fitted)	☐
Suction panel is fitted	☐
Disconnection device working properly	☐

Warning signs

Check the warning signs. Check the box to confirm that the warning signs are fitted.

Warning signs on the combi oven	Fitted
Where are the warning signs fitted?	☐

10.3 Checklist: Customer guidance and instruction

Parts of the customer documentation that must be read without fail

Before working with the combi oven, the user must familiarize himself/herself with the appliance and must have read and understood the following parts of the user manual before carrying out any work:

- the chapter 'Design and function'
- the chapter 'For your safety'
- the sections that describe the activity to be carried out

Check the relevant box to confirm that you have directed the customer to the important chapters in the user manual.

	Customer in- formed
User manual	☐

10.4 Completion of the installation

Warranty

In order to be able to claim under the warranty for the combi oven, the appliance must be installed in accordance with the instructions in this installation manual by a qualified service engineer from an authorized service company. The manufacturer must be in receipt of a fully completed checklist before a warranty claim can be dealt with.

The warranty does not cover damage resulting from improper setup, installation, use, cleaning, use of cleaning agents, servicing, repair or descaling.

Confirmation that appliance is ready for use

The appliance has been installed by skilled personnel (from an authorized customer service office) in accordance with the requirements given in this installation manual and with relevant local regulations.

Date

Name of appliance installer (block letters)

Signature of appliance installer

Confirmation of guidance given to customer

The customer documentation has been handed to the customer / user. The customer has been informed of the important chapters as listed under Checklist: customer guidance and instruction.

Date

Name of customer (block letters)

Signature of customer

Return of documentation

Please return the completed checklist to:

Convotherm Elektrogeräte GmbH
Welbilt
After Sales Service
Talstraße 35
82436 Eglfing
Germany

Combi oven OES mini easyTouch

Serial no.

Item no.

Order no.

Additional technical documentation can be found in the download center at :
www.convotherm.com



Welbilt offers fully-integrated kitchen systems and our products are backed by KitchenCare® aftermarket parts and service. Welbilt's portfolio of award-winning brands includes **Cleveland™**, **Convotherm®**, **Delfield®**, **fitkitchenSM**, **Frymaster®**, **Garland®**, **Kolpak®**, **Lincoln™**, **Manitowoc®**, **Merco®**, **Merrychef®** and **Multiplex®**.

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