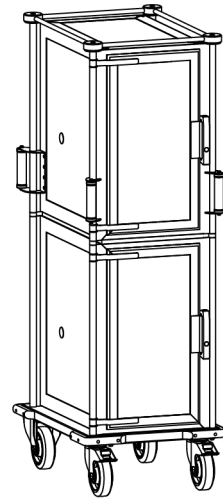
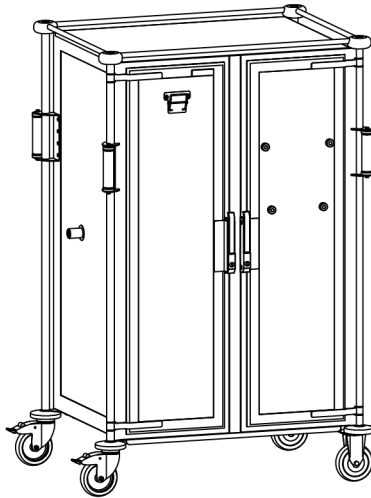
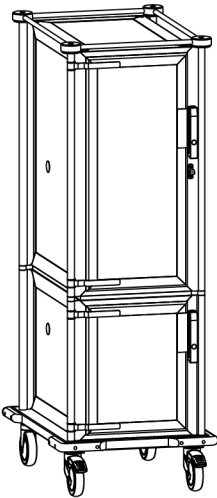
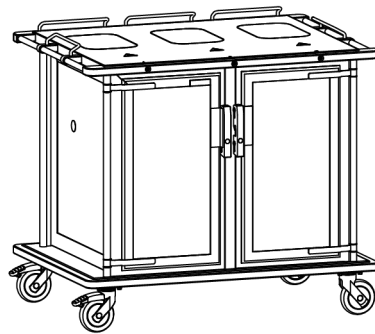
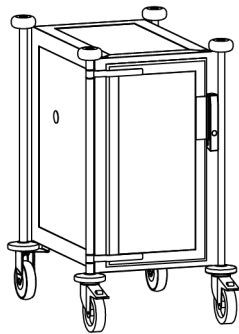


HUPFER

Operating instructions



Isobox Mobil

Basic, Flex

Read the instructions prior to performing any task!

Manufacturer information

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1 General information

1.1 Produktinformationen

Product name	Isobox Mobil
Product types	Basic Flex

1.2 Target group

These operating instructions are intended for the following groups of people who perform the listed activities with or on the product:

Electrician

- Servicing or repairing the electrical installation within the product
- Rectifying electrical faults

Maintenance engineer

- Maintenance work on mechanical systems or trained activities on the electrical, cooling or heating systems
- Simple repairs
- Appropriately trained employees of the customer or an employee of the manufacturer

Operating staff

- Standard operating steps
- Rectifying faults as described in the "Troubleshooting" section
- Cleaning

1.3 Symbols

DANGER

“Danger” indicates a hazardous situation that will result directly in death or serious injury.

WARNING

“Warning” indicates a hazardous situation that may result in serious injury.

CAUTION

“Caution” indicates a potentially hazardous situation that may result in minor to moderate injury.

NOTICE

“Notice” indicates a situation that may result in damage to property.

“Notes” give tips on the correct use of the product.



1.4 Signs



General warning sign

This warning symbol is attached at points on the product that present a risk of accident and injury.



Warning of electric current

This warning symbol is attached at points on the product where the electrical circuits are installed.



Do not use pressure washers or steam cleaners

This warning symbol means that no steam cleaners or pressure washers may be used on or around the product.

2 Product description

2.1 Function

Isobox Mobil food transport boxes are used for transporting and serving meal components in containers or trays or grilles of Gastro-norm or Euronorm format.

Isobox Mobil food transport boxes insulate food and prevent it from becoming cold or warm prematurely. An Isobox with a eutectic plate in it can keep food cold.

In the Basic version, the food transport boxes have enclosed, insulated compartments.

In the Flex version, the food transport boxes have insulated compartments. Heating, cooling or neutral units can be used as an option to keep meal components hot or cold. A neutral unit can seal and insulate the opening of the compartment.

The optional heating plate on the top heats up containers placed on it to 55°C to prevent the meal components from becoming cold while serving.

2.2 Overview

Overview of Isobox Mobil Basic

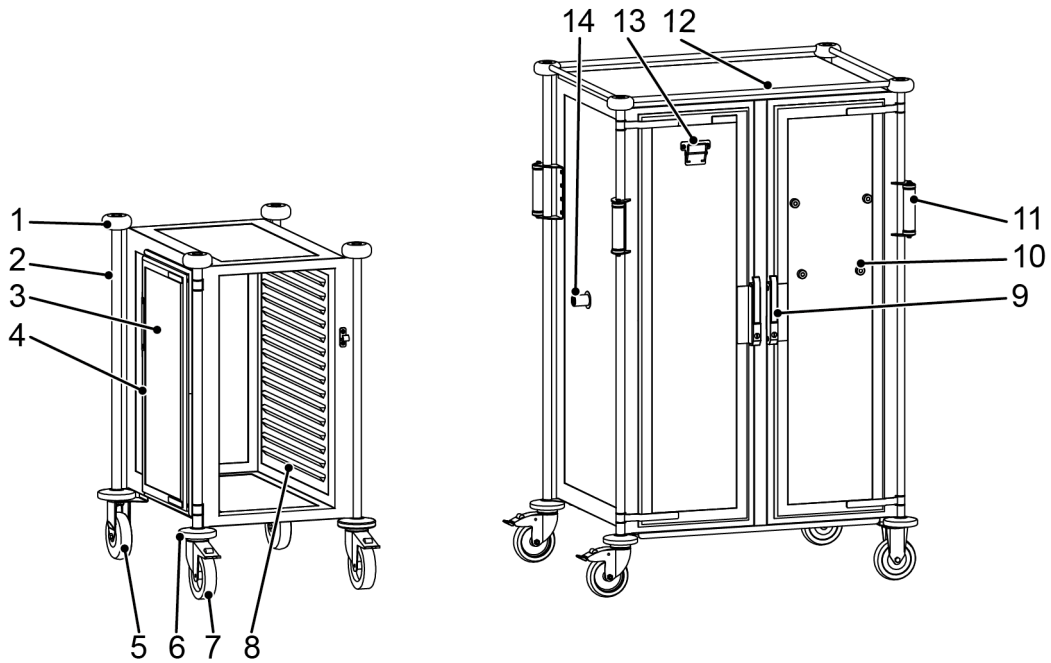


Fig. 1: Example sizes of the Isobox Mobil Basic

- | | |
|---------------------------|---|
| 1 Upper disc bumper | 8 Insertion |
| 2 Handle strip | 9 Door lock |
| 3 Door | 10 Card holder ¹ |
| 4 Seal | 11 HGV transport securing device ¹ |
| 5 Fixed castor | 12 Gallery ¹ |
| 6 Lower disc bumper | 13 Paper clamp ¹ |
| 7 Swivel castor with lock | 14 Magnetic door retainer |

¹ Optional equipment

Overview of Isobox Mobil Flex

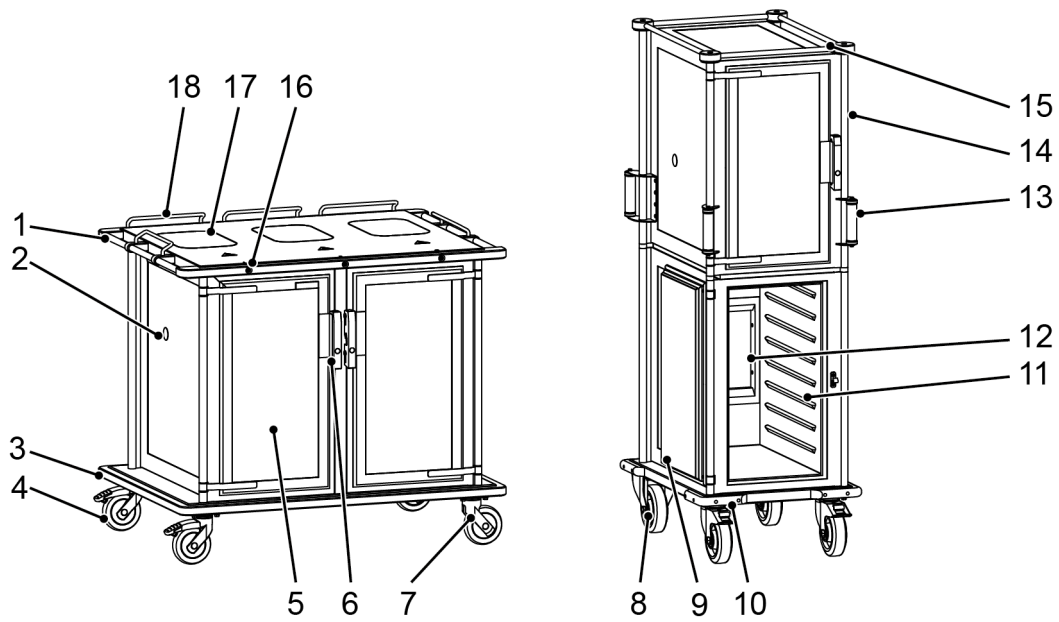


Fig. 2: Example sizes of the Isobox Mobil Flex

- | | |
|---------------------------|--|
| 1 Push handle | 10 Corner bumper |
| 2 Magnetic door retainer | 11 Insertion |
| 3 Bumper strip | 12 Opening for cooling, heating or neutral module ¹ |
| 4 Swivel castor with lock | 13 HGV transport securing device ¹ |
| 5 Door | 14 Handle strip |
| 6 Door lock | 15 Gallery ¹ |
| 7 Swivel castor | 16 Operating lamp for heating plate ¹ |
| 8 Fixed castor | 17 Heating plate ¹ |
| 9 Seal | 18 Gallery ¹ |

¹ Optional equipment

The Isobox Mobil Flex has an optional holder on the rear panel for cooling, heating or neutral units.

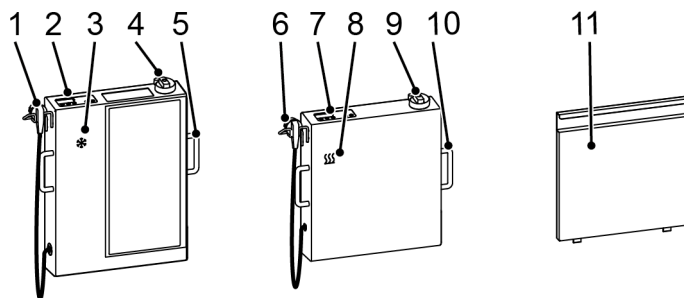


Fig. 3: Cooling, heating and neutral unit for Isobox Mobil Flex

- | |
|----------------|
| 1 Plug |
| 2 Control |
| 3 Cooling unit |
| 4 Rotary lock |
| 5 Handle |
| 6 Plug |

- 7 Control
- 8 Heating unit
- 9 Rotary lock
- 10 Handle
- 11 Neutral unit

2.3 Equipment features

Housing	Consists of aluminium sections and insulating walls
Bumper	Polymer bumpers on corners
Interior	With inserts for containers, trays and grilles Basic <ul style="list-style-type: none"> ■ Polymer design ■ Inserts in pitch 37.5 mm Flex <ul style="list-style-type: none"> ■ Stainless steel design ■ Inserts in pitch 75/37.5 mm
Wheels	2 swivel castors with locks and 2 fixed castors
Swivel castors	With locks that can be actuated to prevent the wheels from swivelling and turning and the trolley from rolling away
Fixed castors	Fixed wheels for easy travel in a straight line
Handle	Side sections are used as push handles Flex 2/30 version with push handle
Doors	Insulated doors with door lock

2.4 Equipment options

Control system ¹	With digital display, for monitoring and adjusting the interior temperature
Heating unit ¹	For keeping meal components hot in Isobox Mobil Flex
Cooling unit ¹	For keeping meal components cold in Isobox Mobil Flex
Neutral module ¹	For sealing the opening in Isobox Mobil Flex
Passive cooling	Frozen GN-1/1 (530 × 325 mm) eutectic plates are inserted into a push-in rack inside the trolley
Lockable door lock	Prevents unauthorised access to the compartment
Paper clamp	For clamping documents and information
Card holder	For keeping documents and information
Wheels	<ul style="list-style-type: none"> ■ 4 swivel castors including 2 with locks ■ Wheels made of polymer, galvanised steel or stainless steel
Interior	Inserts for following dimensions <ul style="list-style-type: none"> ■ Euronorm 530 × 370 mm ■ Gastronorm 530 × 325 mm
Top	<ul style="list-style-type: none"> ■ Stainless steel design ■ Version with 1-3 heating plates to prevent goods becoming cold¹
Gallery rail	For securing items transported on the top of the trolley
Power supply	Central mains connection to supply cooling or heating units Only available with two horizontally arranged compartments ¹

¹Only for Isobox Mobil Flex

2.5 Technical data

The technical data varies according to the design of the transport cart and its equipment options. Basic data can be found on the rating plate attached to the product, further product-specific data can be found on the product data sheet.

Product name		Cooling unit	Cooling unit	Heating unit	Heating unit
Type		Cooling unit D 230 25°C	Cooling unit D 230 32°C	Heating unit D 230/400	Heating unit D 230/800
Dimensions and total weight					
Width ¹	mm	456	456	451	451
Depth ¹	mm	155	155	155	155
Height ¹	mm	428	478	398	398
Total weight ¹	kg	11.5	14.7	8	8
Electrical connection					
Voltage	V	230	230	230	230
Wattage	W	350	400	450	850
Rated current	A	1.5	1.7	2	3.7
Mains frequency	Hz	50/60	50/60	50/60	50/60
Protection class	IP	22	22	22	22
Cooling					
Refrigeration system	--	Peltier cooling	Peltier cooling	--	--
Refrigeration capacity	W	150	150	--	--
Required temperature control range	°C	-5 to +20	-5 to +20	-5 to +99	-5 to +99

¹The figures are approximate values. Deviations are possible.

2.6 Rating plate

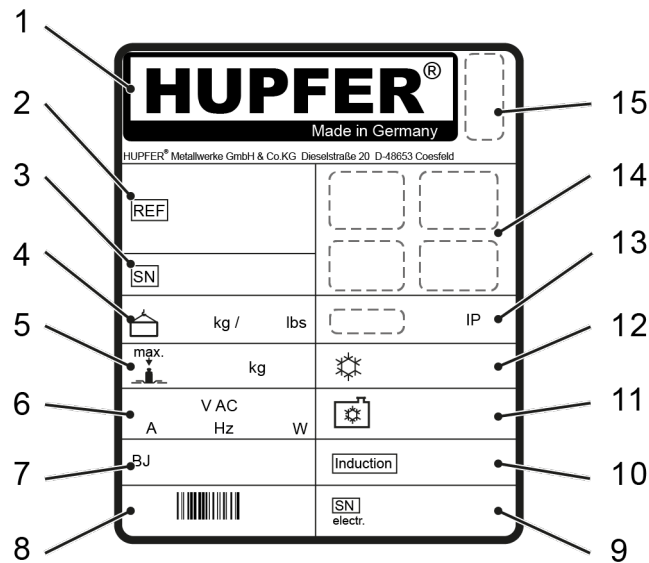


Fig. 4: Rating plate

- | | | | |
|---|-----------------------------------|----|--|
| 1 | Manufacturer and address | 9 | Electrical serial number |
| 2 | Type designation and product code | 10 | Induction frequency |
| 3 | Order number | 11 | Refrigerant |
| 4 | Total weight | 12 | Refrigeration capacity |
| 5 | Payload, total | 13 | Protection code |
| 6 | Electrical connection | 14 | Certification mark/CE label if available |
| 7 | Model year | 15 | Disposal of old appliances |
| 8 | Product code as barcode | | |

3 Safety information

3.1 Intended use

The Isobox Mobil food transport box is used for holding, transporting and serving meal components in containers or on trays or grilles.

Built-in and connected cooling units or eutectic plates can be used to keep meal components cold.

Built-in and connected heating units can be used to keep meal components hot.

Heating elements on the top of the trolley prevent meal components in containers from becoming cold.

Items may be transported on transport trolleys with a continuous gallery, provided they are firmly placed in suitable transport containers and secured against falling down by a non-slip underlay.

The maximum load on the top of food transport boxes with one compartment or two compartments on top of each other is 10 kg. The maximum load on the top of food transport boxes with two compartments next to each other is 20 kg.

Intended use includes following the prescribed procedures, complying with the given specifications, and using the genuine accessories that are provided or additionally available. Any other use is considered inappropriate.

3.2 Improper use

It may not be used for transporting living creatures. Persons must not sit in it or stand on it.

Transport trolleys without a continuous gallery are not intended as a storage surface for objects. Gallery bars are not suitable as handles for pushing or pulling the trolley.

Cooling and heating units may only be used in Isobox food transport trolleys for keeping food hot or cold. Cooling and heating units may only be operated when installed in the device.

Transport carts may only be moved when the doors are closed, and they may only be moved using the push handles. Gallery bars are not suitable for pushing or pulling and can be damaged.

In the case of improper use, the manufacturer and suppliers assume no liability for resulting damage. Damage caused by improper use shall result in loss of liability and of guarantee claims.

3.3 Safety instructions

3.3.1 General information

The unit may only be used in a technically sound condition, while taking risks and safety into consideration, for its intended purpose and in accordance with the operating instructions.

All operating elements and controls must be in a technically sound condition and functioning reliably.

Before each use, the unit must be checked for any visibly apparent damage and defects. If damage occurs, immediately notify those responsible and take the unit out of use.

Changes or conversions are only permitted after consultation and written consent from the manufacturer.

Transport trolleys can move off by themselves and in an uncontrolled manner if the wheels are not locked and the direction lock is engaged.

If the power supply cables are damaged, short circuits and electrical contact may occur. Do not pull on the cable, grip the mains plug. Disconnect the unit from the power supply before moving it.

3.3.2 Transport

When the unit has to be lifted, only use lifting gear and load-bearing equipment approved for the weight of the unit.

Only use transport vehicles that are approved for the total weight of the transport trolley.

The transport trolley does not have any attachment points for eyelets or similar lifting aids.

Always transport the unit upright if possible. It can be lifted using a lifting platform, for example.

If the transport trolley is transported, it must be additionally secured during transport. The locks on the wheels are not sufficient as transport securing devices. They must not be braked during transport on an HGV because the locking mechanism will be damaged by the forces that occur.

3.3.3 Operation and use

Transport trolleys can move off by themselves and in an uncontrolled manner if the wheels are not locked. Secure the stationary transport trolley against rolling away.

Do not park on sloping ground. Only move transport trolleys with the locks released. Moving with the locks engaged will damage the chassis. The locks are not brakes. Only engage the locks when the transport trolley is stationary.

If the transport cart is loaded with incorrect trays/containers, the containers may fall and cause damage. Load the transport cart with the appropriate trays, grilles or containers.

Falling crockery items, trays and containers can cause injury. The rail pairs have no tilt protection. Slide trays and containers all the way into the inserts. Pull the trays and containers all the way out. Trays and containers that have been only partially pulled out can tip and fall onto people during loading.

Keep an overview of the route and move the transport trolley with foresight, for example by pulling when necessary. Watch out for children, other persons and obstacles. Do not move the transport trolley over steps. Two people should move the transport trolley on slopes.

Only move loaded transport carts with closed doors to prevent trays or crockery items from falling out.

Never try to catch a transport trolley that is falling over. Transport trolleys are heavy and can cause serious injury. Think carefully before starting to move the transport trolley.

The mains plug must be freely accessible. In an emergency, pull out the mains plug to disconnect the transport cart from the power supply.

Water or condensation on the electrical system can cause short circuits, corrosion and damage to the unit. Heating and cooling units must not be pre-cooled in a cold room. Allow the food transport box to pre-cool without a heating or cooling unit.

3.3.4 Cleaning

The transport cart must not be cleaned with high-pressure or steam cleaners.

3.3.5 Maintenance

Troubleshooting may only be carried out by maintenance technicians.

Work on electrical equipment may only be carried out by electricians. The work must be carried out in compliance with the rules of electrical engineering.

Work on the refrigeration system may only be carried out by refrigeration specialists. The work must be carried out in compliance with the rules of refrigeration engineering.

3.3.6 Safety devices

Locks on the castors. The locks must be activated when the transport trolley is stationary to prevent the transport trolley from rolling away.

There is a reed contact on the heating or cooling units. The contact enables the function when the unit is attached to the trolley.

4 Transport



WARNING

Risk of crushing

Improper use or incorrect means of transport may cause the transport trolley to tip over, slip or fall. If not adequately secured, there is a danger of serious crushing injury and damage to the transport trolley.

- Secure each transport trolley with appropriate transport securing devices during transport.



NOTICE

Do not engage the wheel locks

The wheel locks are not suitable as transport securing devices, e.g. on lorries. If the wheel locks are engaged during transport, the locks and castors may be damaged.

- Do not engage the wheel locks during transport.



HGV transport securing device

The equipment option "HGV transport securing device" is available for securing the transport trolley during HGV transport.

4.1 Delivery

Delivery is performed by a transport company, whose specialists are responsible for securing the load during transport. At the place of delivery, the transport cart can then be moved on its own wheels.

4.2 In-house transport

A lift must always be used for transport to another floor.

Only use transport vehicles that are approved for the weight of the unit.

- Close the doors.
- Release the locks.

4.3 Lifting

The transport cart does not have any attachment points for eyelets or similar lifting aids.

Always transport the transport cart upright if possible. It can be lifted using a lifting platform, for example.

5 Commissioning

CAUTION

Risk of crushing

The transport cart is heavy, and if it rolls away out of control, there is a risk that people may be injured by being hit or crushed.

- Engage the locks when the transport trolley is stationary.
- The transport trolley should only be positioned on horizontal surfaces.

Instructing operating staff



Before commissioning, operating staff must be instructed on how to use the unit correctly.

ENVIRONMENT

Help protect our environment. Separate the packaging materials and recycle them. Dispose of:

- Packaging and foils in the (yellow) recycling bin.
- Cardboard boxes and paper in the paper recycling bin.

Clean the unit thoroughly before first use (see cleaning instructions).

Check the functions of the unit:

- Functionality of all mechanical parts
- Functionality of the controls¹
- Connector plug and connecting lead¹
- Functionality of the cooling unit¹
- Functionality of the heating unit¹
- Functionality of the locks

¹Optional

6 Operation

6.1 Closing and opening doors

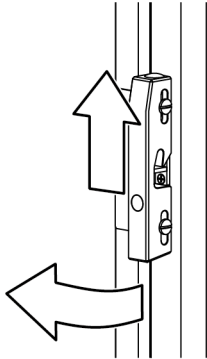
Snap lock

You can open the door.

1. → Pull the snap lock all the way up.
 - ➔ The door is locked by a magnet in the side wall.
2. → Open the door fully.

You can close the door.

- Push the door against the snap lock.
 - ➔ The door audibly engages.



6.2 Moving the cart

WARNING

Injuries from rolling away

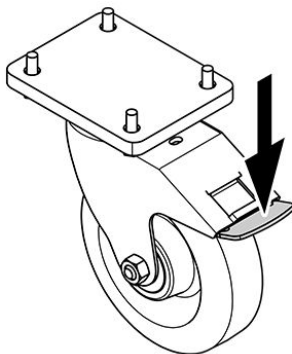
The unit is heavy, and if it rolls away out of control, there is a risk that people may be injured by being hit or crushed.

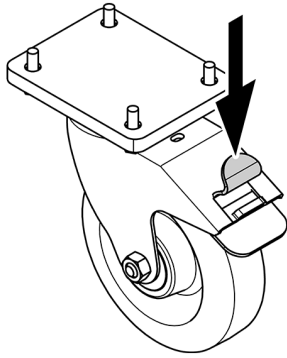
- Engage the locks when the transport trolley is stationary.
- The transport trolley should only be positioned on horizontal surfaces.

Engaging the locks

Swivel castors with locks can block the wheel from turning and swivelling. When the locks on both swivel castors are engaged, the transport cart is secured against rolling away.

- Engage the lock as shown on the left.
 - ➔ The wheel cannot turn or swivel.





Releasing the lock

- Release the lock as shown on the left.
- ➔ The wheel can turn and swivel.

Moving with the push handle

WARNING

Contusion hazard

Transport carts rolling in an uncontrolled way may crush persons.

- Never leave the transport cart to roll unattended.
- Only drive uphill or downhill if you can control the transport cart. If necessary, involve a second person.
- Only park the transport cart on level surfaces.
- Each time you park the transport cart, secure it with both locks against rolling away.
- Fix the wheels in the “straight ahead” position.

NOTICE

Checking the door lock

If they are not properly locked, the doors may accidentally spring open and items may fall out from inside the transport cart.

- Before each trip, check that the doors are correctly locked.

1. → Close the doors.
2. → Release the locks.
3. → Move the transport trolley by the push handles.
4. → Make sure that the path ahead is clear.
5. → Only move the transport trolley over level, dry and stable surfaces.
6. → Have someone help you if the transport trolley has to be moved on a slope.
7. → Secure the transport trolley with the locks when stationary.

6.3 Inserting cooling, heating and neutral units

CAUTION

Risk of burns

There is a risk of burns on interior walls and components of the heating unit.

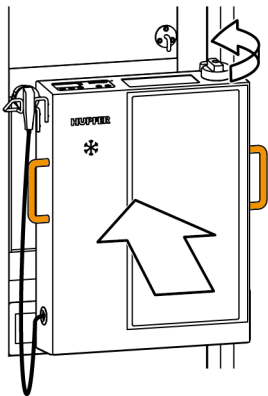
- Avoid direct contact with hot components.
- Only operate the unit when it is installed.
- Allow the appliance to cool down with the doors open.
- Always lift the unit by the handles.

CAUTION

Risk of injury

There is a risk of injury from units falling out.

- Insert the cooling/heating unit flush.
- Lock the unit with the rotary lock.



Inserting and removing the unit

You can insert a cooling or heating unit into the opening on the rear.

1. → Hold the unit by the handles.
2. → Insert the unit into the free opening.
 - ➔ Magnets lock the unit.
3. → Check that the unit is seated correctly.
 - ➔ The unit should be flush with the opening.
4. → Close the rotary lock.

You can remove the unit.

1. → Disconnect the unit from the power supply.
2. → Allow the unit to cool down if necessary.
3. → Release the rotary lock.
4. → Pull the unit by the handles out of the opening.

You can insert the neutral unit into the empty opening and remove it. The magnets lock the neutral unit.

6.4 Operating the heating and cooling unit

The unit is operated via the control panel.

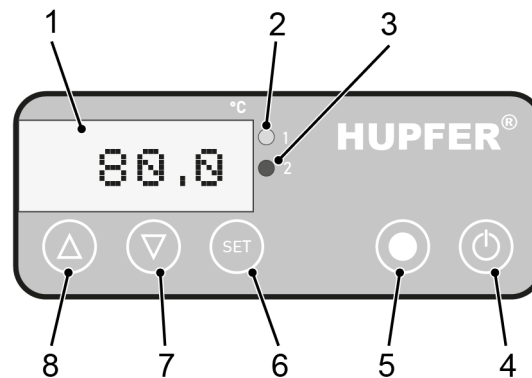


Fig. 5: Controls and display for the heating or cooling unit

- 1 Current temperature display
- 2 Appliance heating/cooling display
- 3 Not assigned
- 4 ON/OFF button
- 5 Button not assigned
- 6 SET button
- 7 DOWN button
- 8 UP button

Switch on the controls

As soon as the unit is connected to the power supply, the controls are switched on.

→ Connect the unit to the power supply.

- ➔ The display shows OFF when the unit is switched off.
- ➔ The display shows the current temperature when the unit is switched on.

The controls will remember if the cooling was switched on or off when the unit is disconnected from the power supply.

Switching the unit on and off



→ Press the ON/OFF button.

- ➔ The display shows OFF when the unit is switched off.
- ➔ The display shows the current temperature when the unit is switched on.

Display set temperature



→ Press the SET button.

- ➔ The required temperature is shown in the display.

Setting the required temperature




1. → Press and hold the SET button.

- ➔ The required temperature is shown in the display.



2. → Select the required temperature using the corresponding UP and DOWN buttons.

3.  Release the SET button.
 - ➔ The required temperature is now changed.




6.5 Keeping food cold

Precooling time



The required pre-cooling time depends on several factors (including appliance size, ambient temperatures). The values specified for the precooling time are reference values.

Eutectic plate

1.  Slide frozen eutectic plates into the top insert.
2.  Close the doors.
3.  Position the unit a sufficient distance from heat sources and steam-forming devices, e.g. ovens and heated wells.

The compartment must precool for approx. 1 hour with the doors closed.


Cooling unit




The unit requires unobstructed air exchange for cooling and for electronics to function properly.


- Observe the minimum clearance around the ventilation grilles.
- Do not cover or move any ventilation grilles.

You can keep food in a compartment cold when a cooling unit is installed in that compartment.

1.  Engage the wheel locks.
 - ➔ The transport cart is secured against rolling away.


2.  Connect the cooling unit to the power supply.




3.  Switch on the unit if necessary.


➔ The current temperature appears in the display.



4.  Check the required temperature in the display.



5.  Set the required temperature if necessary.

6.  Position the unit a sufficient distance from heat sources and steam-forming devices, e.g. ovens and heated wells.



The compartment must precool for approx. 1 hour with the doors closed.

6.6 Keeping food hot

Preheating time



The required preheating time depends on several factors (including appliance size, ambient temperatures). The values specified for the preheating time are reference values.

Heating unit



The unit requires unobstructed air exchange for heating and for the electronics to function properly.

- Observe the minimum clearance around the ventilation grilles.
- Do not cover or move any ventilation grilles.

You can keep food hot in a compartment if a heating unit is fitted in that compartment.

1. Engage the wheel locks.

- ➔ The transport cart is secured against rolling away.

2. Connect the heating unit to the power supply.



3. Switch on the unit if necessary.

- ➔ The current temperature appears in the display.



4. Check the required temperature in the display.



5. Set the required temperature if necessary.

The compartment must preheat for approx. 1 hour with the doors closed.



Heating plate

The heating plate reaches a temperature of approx. 55°C and prevents meal components from becoming cold while serving.

1. Connect the unit to the power supply.

2. Set the On/Off switch to position 2.

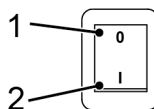
- ➔ The switch lights up green.

- ➔ The plate heats up.

The plate must heat for approx. 20 minutes.

You can switch off the heating plate.

Set the On/Off switch to position 1.



6.7 Loading goods

WARNING

Risk of burns

There is a risk of burns on hot meal components, interior walls and components of the heating unit.

- Avoid direct contact with hot components.



Load from bottom to top

Load the transport cart from the bottom to the top.

- Unoccupied spaces are visible immediately.
- Lower centre of gravity when partially loaded.
- Cold air sinks and the cooling is more effective.

1. Engage the wheel locks.
 - ➔ The transport cart is secured against rolling away.
2. Slide the items into the guides as far as they will go.
3. Load the trolley from bottom to top.
4. Close the trolley doors.

6.8 Removing the goods

WARNING

Risk of burns

There is a risk of burns on hot meal components, interior walls and components of the heating unit.

- Avoid direct contact with hot components.

1. Engage the wheel locks.
 - ➔ The transport cart is secured against rolling away.
2. Open the doors.
 - ➔ You can remove and serve the trays.

6.9 Finishing operation

→ Engage the wheel locks.

- ➔ The transport cart is secured against rolling away.

Cooling/heating unit

1. → Switch off the module with the on/off switch.

- ➔ The display shows OFF.

2. → Disconnect the unit from the power supply.

Eutectic plate

1. → Remove the eutectic plates.

2. → Empty the condensate pan.

3. → Remove all stored items from the interior.

4. → Clean the transport cart.

7 Care and cleaning



DANGER

Electrical hazard

Electricity is a serious hazard and can cause injury or even death.

- Before starting any cleaning and maintenance work, disconnect the transport cart from the mains.
- Disconnect the mains plug and put away the cable in its designated place until the next use.
- Do not clean the transport cart with steam cleaners or high-pressure cleaners.



CAUTION

Risk of burns

There is a risk of burns on interior walls and components of the heating unit.

- Avoid direct contact with hot components.
- Allow the appliance to cool down with the doors open.

7.1 Care instructions

The door lip seals become brittle over time, for example due to high temperature fluctuations.

- Treat them at regular intervals with commercially available care products for lip seals.

7.2 Cleaning intervals

Interval	Maintenance work	Personnel
After each use and according to the in-house hygiene concept	Cleaning the food transport box	Operating staff
As needed and according to the in-house hygiene concept	Cleaning the housing and unit	Operating staff
	Disinfecting the food transport box	Operating staff

7.3 Permissible cleaning types

CAUTION

Spreading water

Wet and dripping transport trolleys distribute water on paths. There is a severe risk of slipping on wet paths.

- Dry the transport trolley after cleaning.
- Remove the water from the interior, e.g. by tilting the transport trolley by 5°.

NOTICE

Deformation at high temperatures

The polymers used deform at high temperatures and longer contact times.

- Restrict the contact time to max. 3 seconds.
- Restrict the temperature to max. 120 °C.

NOTICE

Bearing damage

The wheel bearings are greased. Washing out the bearing grease will result in bearing damage.








- Do not direct jets directly at the castor bearings.

NOTICE

Damage due to high-pressure cleaning

Lip seals on the door and housing can become loose due to direct high-pressure jets and damage will result.

- Do not point the spray directly at the lip seals.
- Keep a distance of at least 30 cm between the nozzle and the device.
- Use a flat stream nozzle.

Cleaning type		Definition of the cleaning operation	Approval for Isobox Mobil
Manual cleaning	Drying	Cleaning with dry cleaning agents	
	Damp	Cleaning with a damp cloth and degreasing liquid cleaner	
	Wet	Cleaning with a wet sponge and degreasing liquid cleaner	
Water hose	Pressure \leq 8 bar	Cleaning with a spray jet and degreasing cleaning agents if required: <ul style="list-style-type: none"> ■ Do not spray into the bearings. 	
High-pressure/steam cleaning	High-pressure \leq 200 bar	Cleaning the surfaces: <ul style="list-style-type: none"> ■ max. 30-90 seconds ■ Do not spray into the bearings ■ Use a flat stream nozzle ■ Keep a distance of at least 30 cm 	
	Wet steam \leq 135° C	Cleaning the surfaces: <ul style="list-style-type: none"> ■ max. 30-90 seconds ■ Short exposure time for individual sections ■ Do not spray into the bearings 	
Washing devices	Water temperature \leq 90° C	Spraying with cleaning and rinsing agent: <ul style="list-style-type: none"> ■ max. 30-90 seconds 	

7.4 Permissible cleaning agents

! NOTICE

Incorrect cleaning agents

Incorrect treatment of the installed material surfaces will result in damage and corrosion.

- Only use cleaning agents approved for cleaning.
- Follow the instructions of the cleaning agent manufacturer.






Suitable cleaning agents

The manufacturer cannot assess the suitability of specific detergents or disinfectants.

- Check the notes on the cleaning agents or disinfectants to find out whether they are suitable for the materials of the transport cart.
- If in doubt, ask the manufacturer of the agent if it is suitable for the materials of the transport cart.

Cleaning agent	Approval
Degreasing agent	✓
■ Neutral liquid cleaner	
Salty cleaning agents	✗
■ Table salt	
■ Hydrochloric acid	
Sulphuric cleaning agents	✗
■ Sulphur dioxide	
■ Sulphuric acid	
Chlorinated cleaning agents	✗
■ Chlorine cleaner	
■ Sea water	
■ Bleach	
Ferrous material	✗
■ Water with iron content	
Low-oxygen cleaning agents	✗
■ Low-oxygen water	
■ CO2 atmosphere	
Neutral cleaning agents	✓
■ Neutral cleaning agents pH 7	
■ Slightly acidic cleaning agents pH 6 – 7	
■ Slightly alkaline cleaning agents pH 7 – 8	
Acidic cleaning agents pH 1 – 5	✗
■ Acids	







Cleaning agent	Approval
Alkaline cleaning agents pH 8 – 14	
<ul style="list-style-type: none"> ■ Alkalis 	
Abrasive cleaning agents	
<ul style="list-style-type: none"> ■ Scouring pad ■ Pot scrubber 	
Non-abrasive cleaning agents	
<ul style="list-style-type: none"> ■ Uncoated sponges ■ Soft cloths 	

7.5 Material compatibility







When selecting the cleaning agent, make sure it is compatible with the materials used.

Material	Components
Stainless steel	Interior, lid
Aluminium	Frame sections
PE 500 (polyethylene)	Bumper strips, door lock
Silicone	Lip seals

7.6 Manual cleaning

1.  Clean the interior of the transport cart after each food transport and according to the operator's instructions.
2.  Clean the outer surfaces of the unit after use or as required.
3.  For wet cleaning, use a soft cloth or an uncoated sponge.
4.  Use degreasing liquid cleaners.
5.  Rinse so that all detergents and disinfectants are completely removed.
6.  Dry the interior and exterior surfaces after cleaning.

Cleaning the units

1.  Pull out the mains plug.
2.  Remove the unit (see *↔ 'Inserting and removing the unit' on page 21*).
3.  For wet cleaning, use a soft cloth or an uncoated sponge.
4.  Use degreasing liquid cleaners.
5.  Dry surfaces after cleaning.
6.  Put the unit back into the transport cart.

7.7 Disinfecting

All the surfaces can be disinfected with commercially available surface disinfectants.

NOTICE

Damage to property

High concentrations of disinfectant can cause corrosion damage.

- Follow the instructions of the disinfectant manufacturer.

8 Maintenance and repair

DANGER

Electrical hazard

Electricity is a serious hazard and can cause injury or even death.

- Before starting any cleaning and maintenance work, disconnect the transport cart from the mains.
- Disconnect the mains plug and put away the cable in its designated place until the next use.
- Do not clean the transport cart with steam cleaners or high-pressure cleaners.

WARNING

Unqualified staff

Danger from incorrect handling of mechanical components.

- Only qualified personnel may carry out maintenance work.

CAUTION

Risk of burns

There is a risk of burns on interior walls and components of the heating unit.

- Avoid direct contact with hot components.
- Allow the appliance to cool down with the doors open.

8.1 Maintenance intervals

Depending on the load, the transport trolley should be checked regularly for to ensure it functions properly. The manufacturer recommends inspection and maintenance of the following components at regular intervals:

Interval	Maintenance work	Personnel
daily	Carry out a visual inspection of the entire unit.	Operating staff
annually	<ul style="list-style-type: none"> ■ Check entire unit for distortion and mechanical damage ■ Check effectiveness of the locks ■ Check mechanical strength of the wheels 	Maintenance engineer
	Check the effectiveness of the door seals	Maintenance engineer

8.2 Error messages

Fault description	Cause	Remedy	Personnel
H i	Alarm, temperature too high	--	
L 0	Alarm, temperature too low	--	
E IL	Short circuit in sensor F1	Check or replace the F1 sensor.	Maintenance engineer
E IH	Broken sensor F1	Check or replace the F1 sensor.	Maintenance engineer
EP 0	Fault in the control unit	Repair or replace control system.	Maintenance engineer
EP 1	Error in parameter memory	Repair control system.	Maintenance engineer
EP 2	Error in data memory	Repair or replace control system.	Maintenance engineer

8.3 Troubleshooting

Troubleshooting

In the event of malfunctions and complaints within the guarantee period, contact our service partners. After the guarantee period has expired, have any necessary repair work carried out by our service partners or qualified electricians.

Fault description	Cause	Remedy	Personnel
Transport trolley pulls to one side during transport	Wheel bearings damaged	Replace worn wheels	Maintenance engineer
Running noises made by wheels	Wheel bearings damaged	Replace worn wheels	Maintenance engineer
Castor lock no longer working	Lock worn out	Replace lock	Maintenance engineer
Doors do not close correctly	Door seal defective	Replace door seal	Maintenance engineer
	Lock tension spring defective	Replace tension spring	Maintenance engineer
Unit does not cool	Cooling unit defective	Take cooling unit out of operation, inform service engineer	Maintenance engineer
	Plug or connection cable defective	Take cooling unit out of operation, inform qualified electrician	Electrician
Unit cools very slowly	Door not closed	Close door	Operating staff
	Seal damaged	Inform service technician and have seal replaced	Maintenance engineer
Unit does not heat	Heating unit not inserted correctly. A safety switch is preventing the function.	Reinsert the heating unit. The unit must be completely seated.	Operating staff
	Heating unit defective	Take heating unit out of operation, inform the service engineer	Maintenance engineer
	Plug or connection cable defective	Take heating unit out of operation, inform qualified electrician	Electrician
Unit heats slowly	Door not closed	Close door	Operating staff
	Seal damaged	Inform service technician and have seal replaced	Maintenance engineer

8.4 Repairs and spare parts

Spare parts and accessories are available from our customer service. Replace defective components with genuine spare parts. Only then can safe and reliable operation be guaranteed. When ordering spare parts or requesting customer service, always state the order number and the information on the rating plate. This information helps avoid follow-up queries and speeds up the process.

8.5 Recommissioning

The transport cart may only be used in a technically sound condition, for its intended use, and in accordance with the operating instructions. Check the transport cart for visible damage before each use. In the event of damage, inform the responsible departments immediately. Only operate transport carts in faultless technical order.

- Check the transport cart functions, especially the lock and cooling.
- Clean the transport cart thoroughly before putting it back into operation.

9 Disposal



Help protect our environment. Make sure that the materials are recycled.

- Have the device disassembled and disposed of by recycling companies. All the materials are recyclable.
- Electrical components may only be removed by qualified electricians.

→ Take the components to a designated disposal centre.