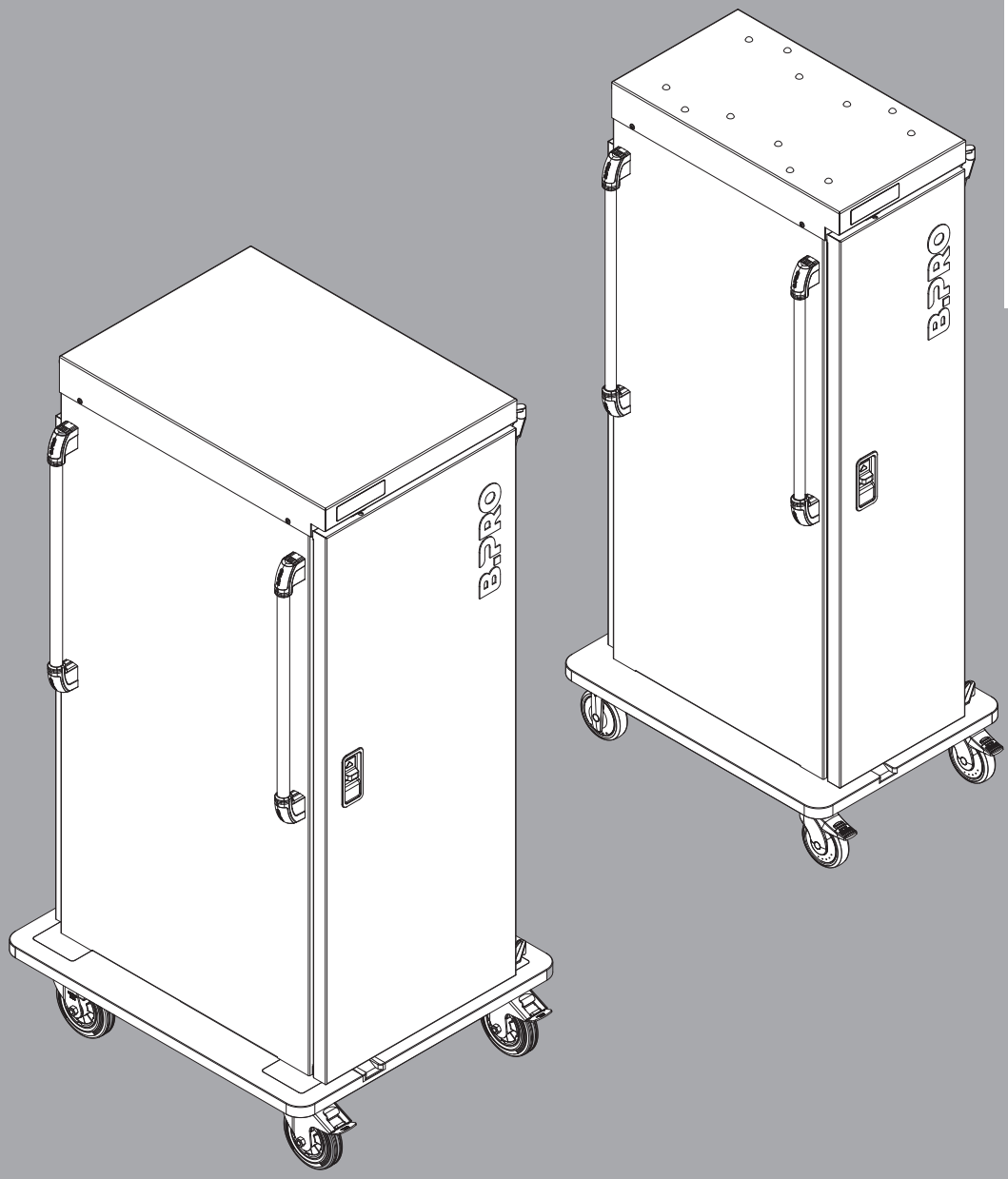
B.PRO
CATERING SOLUTIONS



B.PROTHERM STAINLESS STEEL, COOLED

BPT E 30 (24) C

BPT E 36 (30) C

BPT E 36 (30) C BANQUET

Translation of the original operating instructions

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Technical changes

Subject to modifications for the purpose of technical improvement.

Contents

1 About these operating instructions

1.1 Product documentation

These are the original operating instructions.

Target group:

operating personnel, kitchen directors.

1.2 Typographical conventions

ⓘ **Explanatory information, reference** on special features or special cases
↳ **Cross reference** to a chapter or external document
✓ **Requirement** which must be met before the subsequent steps can be carried out.
➨ **Action or activity** which must be carried out.

Unit model XYZ
A section identified in this way applies only to a particular unit model or unit option.

1.3 Warnings

⚠ Signal word! Type and source of danger!
Possible consequences of non-compliance with warnings.
➨ Measures to avoid hazards and the consequences thereof.

The signal word (danger, warning, caution) indicates the level of danger.
Danger warns of possible highly severe/fatal bodily injury.
Warning warns of possible serious bodily injury.
Caution warns of possible minor bodily injury or damage to property.

2 About this product

2.1 Scope of application

The B.PROTHERM stainless steel cooled banquet trolley is designed for the following applications:

- Keeping prepared, pre-portioned food cold on plates with cloches, on Gastronorm grates or in Gastronorm containers
- Transporting food to the servery

The cooled B.PROTHERM stainless steel may only be used for the temporary storage and transport of food in containers.

The unit is particularly suitable for use in social facilities (clinics, retirement homes, children's day care centres), hotels, the food service industry (banquets, party services) and in company catering (canteens, dining halls).

The following applications are not permitted:

- Permanent cooling of food (refrigerator function)
- Cooling down warm dishes and food
- Cooling rooms
- Transporting persons with or on the unit or its attachments
- Use as a substitute for a ladder, climbing aid or climbing frame
- Transport or storage of hazardous or toxic substances/liquids

2.2 Conditions of use

Environment

Use the unit wherever the ambient temperature is between +15 °C and +38 °C and at normal humidity levels (without condensation) in closed rooms or in roofed areas where the unit will notbe exposed to the weather.
The unit has been developed for use up to 2,000 m above sea level.

2.3 Product features

General information

The cooled B.PROTHERM stainless steel is made of stainless steel as standard.
The unit body is double-walled and insulated.
The front of the unit is closed by a double-walled, insulated unit door.
The unit door has two-point locking including a phosphorescent panic lock on the inside of the door.
With the help of the stacking nubs, synthetic B.PROTHERMs can be stacked on top of the unit. On the banquet model, this only possible with the optional railing.
The cooled B.PROTHERM stainless steel chassis has two steering castors with castor brakes and two fixed castors as standard.
The banquet model is equipped with four steering castors as standard, two of which have castor brakes.
The cooled B.PROTHERM stainless steel is equipped with active convection cooling, whereby the cooled air is circulated with the aid of fans.

The following unit models are available:

- BPT E **30 (24) C** = 30 ledge pairs (24 x 1/1 and 6 x 1/2 = 30 (24))
- BPT E **36 (30) C** = 36 ledge pairs (30 x 1/1 and 6 x 1/2 = 36 (30))
- BPT E **36 (30) C** banquet = 36 ledge pairs (30 x 2/1 and 6 x 1/1 = 36 (30))

Handling and operation

Vertical push handles allow the trolley to be moved easily. All-round bumper rails protect the unit from damage.
The solid bottom plate protects the unit from damage caused by impact during transport.
The unit doors feature a self-closing door lock.
The unit doors can be opened approx. 270° and locked to the exterior sides.
The interior side walls feature support ledges.
The cooled B.PROTHERM stainless steel can be loaded with Gastronorm containers GN 2/1, GN1/1, GN1/2.
The cooled B.PROTHERM stainless steel can also be loaded with food on dishes using Gastronorm grates.
The cooling parameters can be set down to the degree using temperature control with digital temperature display. The display shows the current operating mode of the unit.
The temperature control registers deviations of the actual temperature from the setpoint temperature outside a pre-set temperature range and signals them visually on the display.
The temperature range of the temperature control lies between +2 °C and +10 °C.

2.3.1 Standard model

The cooled B.PROTHERM stainless steel is equipped as standard as follows:

- Double-walled unit body made of stainless steel
- Space between ledges of 38.3 mm
- Digital temperature control
- Two steering castors with castor brakes and two fixed castors
- Banquet model with four steering castors, two of which have castor brakes
- Safety push handle on unit body
- Solid base plate with integrated bumper rail

2.3.2 Options/accessories

The cooled B.PROTHERM stainless steel is available with the following optional equipment:

- Menu card holder
- Slide-in frame and GN support bars for inserting a variety of GN containers on 1/1 model
- Castor model available in different materials and sizes
- Gastronorm grates on banquet model
- Flat unit top with 4-sided railing made of stainless steel
- Additional bumper rail (synthetic panel) on top (only on 1/1 version)
- Unit body in hygiene type H1
- Additional socket outlet
- Customised colour scheme
- Convenient door opening with foot operation (kick latch)
- Lockable unit door
- Coupling/draw bar (only on banquet model)
- QM Spot (digital temperature monitoring)
- Individualisation through colour concept

2.4 Functional principle

The cooled B.PROTHERM stainless steel is equipped with active convection cooling.
Convection cooling operates based on the following principle:
The refrigeration system evaporator on the rear wall of the unit extracts heat from the air inside the unit.
Fans circulate the cooled air inside the unit through the air baffle on the rear wall of the unit.

This presents the following advantages:

- Quick cooling of the unit interior
- A lower cooling temperature (+2 °C) than with active contact cooling
- Uniform temperature distribution

- Inside the unit, a condensation water catch tray is installed above the machine compartment.

Function of draw bar (optional)

The draw bar is installed under the trolley.
The draw bar lock is located at the rear and is latched into position in a recess with a pin.
This prevents unintentional extension. When intentionally extending the draw bar by engaging it in the front hole, the pin slides over a slope until it reaches the front draw bar lock.
To stow the draw bar, it is pushed down to the ground and simply inserted back in until it slots into the storage position and is secured.

3 Safety

3.1 Safe use

- ➨ Carefully read and comply with the operating instructions before commissioning and using the appliance for the first time.
- ➨ Read and observe the information on safe use, safety instructions and warnings.
- ➨ Store the operating instructions so that they are accessible to the operating personnel at all times.

3.2 General information

The unit has been built using state-of-the-art technology. All the requirements necessary to ensure safe operation have been met. Nevertheless, residual risk does exist when operating the unit. The safety precautions and warnings in these operating instructions are there to help you protect yourself against these hazards.
Improper use of the unit can lead to serious injury or damage.
The unit may only be used by persons whose physical, sensory or mental abilities are not subject to any restrictions relevant to operating the unit.

Warnings

- ➨ Observe the warnings with the danger symbol (warning triangle) in the text.

3.3 Operator duties

The owner is responsible for ensuring that all users have read these instructions before operating the unit.

- Make sure that users of the unit are instructed in its operation and have understood these operating instructions.
- Make sure that users are aware of the hazards that the unit presents and that they are able to assess them.

3.4 Instruction of third parties

If the unit is transferred to third parties, these persons must be instructed in the safe handling of the unit and possible dangers must be pointed out.

3.5 About this product

3.5.1 Scope of application

The unit may only be used for the applications specified.

The operator is responsible for ensuring that the unit is used properly and only for the application specified.

3.5.2 Conditions of use

- The unit may only be operated under the permissible ambient conditions.
- Do not use the unit outdoors during a thunderstorm.
- Protect the unit from direct sunlight.
- Make sure that users of the unit are instructed in its operation and have understood these operating instructions.

Serious injury and damage caused by exploding, flying parts and deflagration gases

- If explosive materials or containers are stored in the unit and the unit is put into operation, this may cause an explosion and subsequent personal injury and property damage.
- Do not store any explosive materials, such as aerosols with flammable propellant, in this unit.

3.5.3 Warning signs

The following optional warning signs are attached to the unit:

Warning sign	Meaning – Mounting position
	“Warning of flammable substances” (Class A3 refrigerant) as per EN ISO 7010 Mounting position: Unit body
	“Danger! No naked flames. Fire, open sources of ignition and smoking prohibited!” as required by EN ISO 7010 Mounting position: Unit body
	“Pressurised refrigeration unit” as per ISO 7000 Mounting position: Refrigeration unit

- Replace any illegible, damaged or missing warning signs immediately.

3.6 First aid

3.6.1 Information on what to do in the event of injuries

The unit operator must specify measures for emergencies (accidents and faults). The operator must create brief instructions and notify their employees thereof.

- Affix the quick guide clearly and legibly in the immediate vicinity of the appliance.
- Observe the operator’s rescue and reporting chain.

3.7 Transport

3.7.1 Upright transport position

- Transport the unit in an upright position only.
- If the unit was not transported upright, wait 2 hours before commissioning.

The unit must not be operated during transport.

Transport with a truck or delivery vehicle

- The unit may only be transported in a truck or delivery vehicle which features a loading ramp. The loading ramp must not exceed an angle of inclination of 5°.

The unit is not properly secured for transport if only the castor brakes have been applied.

- Secure the unit on all four sides to prevent it from shifting.
- Secure the unit against vertical movement during transport.
- Use padded locking bars.

3.8 Commissioning

3.8.1 Location

- Set up/operate the unit in a well-ventilated environment only.
- Only operate the unit on an even, firm surface.
- Never operate the unit next to equipment which emits large amounts of steam, such as a dishwasher.

Steam can cause moisture condensation on the unit. When the unit is connected to the power, there is a danger of the moisture film causing a short-circuit or an electric shock.

Blocked ventilation slits can cause the refrigeration unit to overheat and fail.

- Keep the ventilation slits clear.
  - Ventilation slits must be at least 10 cm from a wall when the refrigeration unit is switched on.

The refrigerant propane (R290) is highly flammable and explosive (refrigerant group A3 according to DIN EN 378-2). In the event of a leak, an ignitable gas-air mixture can be produced which can trigger an explosive reaction if the critical mixing ratio is reached and there is a suitable source of ignition source.

3.8.2 Commissioning after storage

When the unit is brought from a cold storage room to a kitchen, moisture from the air in the room condenses on the surface of the unit. When the unit is connected to the mains, there is a danger of the moisture film causing a short-circuit or an electric shock!

- Do not operate the unit until it has reached room temperature.

3.8.3 Mains connection

- Make sure that the mains voltage and frequency on the rating plate correspond with those for the mains socket outlet.
- Only connect the unit to a socket outlet that is protected with a fault-current protective device (residual-current circuit breaker).
  - Each phase must be protected with max. 16 A.
- The unit must not be used if the insulation on the mains cable or the mains plug is damaged.
- In order to avoid damage to the unit electrical system, the mains plug is only to be plugged in or unplugged when the unit is switched off. Only unplug by pulling on the mains plug housing.

3.9 Handling and operation

3.9.1 General information

➨ Make sure that users are aware of the hazards that the unit presents and that they are able to assess them.
The unit may only be used by persons whose physical, sensory or mental abilities are not subject to any restrictions relevant to operating the unit.
➨ The unit is only to be used when it is in proper working order.

The unit can cause injury and property damage if allowed to roll away accidentally!
➨ Always apply the castor brakes to prevent the unit from rolling away.

➨ When keeping food cool, only open the unit briefly to remove food.
➨ Always keep lids on Gastronorm containers containing food.
➨ Always cover food on plates with cloches.

➨ In the event of a fault that cannot be rectified immediately, stop operating the device and secure it against accidental use.
➨ If the device is damaged, take it out of operation and secure it against accidental use.
➨ Disconnect the unit completely from the power supply.
➨ Have an authorised service point perform repairs immediately.
↳ Chapter "Repairs" on page 38

➨ Only have authorised, expert professionals trained to handle propane refrigerants (R290) carry out work on the refrigeration system.
➨ Do not operate any electrical appliances in the usable space of the unit.
Naked flames are not permitted within a radius of 1 m.

3.9.2 Fire hazard

Fire hazard, in particular through naked flames, electric or static sparks generated by static charge, and hot surfaces!
➨ Avoid naked flames in the usable space or immediate vicinity of the unit.
➨ Avoid hot surfaces.
➨ In the event of static charge, appropriate countermeasures must be taken (e.g. use of personal protective equipment, antistatic castors or an antistatic conveyor).

3.9.3 Possible impairment of food quality

The quality of the food located in the unit may be impaired by a power failure, unit malfunctions or other interruptions during storage!
➨ Check whether the food quality has been impaired after the core temperature has increased.
➨ Dispose of food if necessary.

3.9.4 Loading and removing food

➨ To prevent shifting of the centre of gravity to the unit top, the unit should generally be loaded from the bottom up.
➨ Food is removed from the top downwards.
➨ Do not exceed the upper weight limit specified in the technical data when loading.
➨ Always cover food on plates with cloches. Always cover Gastronorm containers containing food with lids.

3.9.5 Shutting down

➨ Unplug the mains plug only with the unit switched off, otherwise the unit electrical system and the mains socket outlet can be damaged.
➨ Pull out the mains plug to disconnect the unit from the power supply.
➨ Only unplug the mains plug by the mains plug housing.
➨ Unplug the mains plug and store it in the mains plug retainer on the unit.

3.9.6 Risk of locking in children

- Secure empty units from access by children.

If a child is accidentally shut inside the unit body, they can open the door themselves by pressing the phosphorescent panic button.
The unit door will open if the panic button on the inside of the door is pressed with a force of 70 newtons (corresponds to a force of 7 kg).

- Place the empty units with the unit door side toward the wall or place them in an area inaccessible to children.
- Always make sure that there are no children inside before locking the unit doors.

3.9.7 Hygiene regulations

- When keeping food cool, observe the relevant regulations on foodstuffs as well as the characteristics of the food in question.
- You must comply with the specifications in Regulation (EC) no. 852/2004 and your national hygiene regulations.

3.9.8 Change of location

- Before transporting the unit, take suitable measures to ensure that it can be transported safely.
- The unit location must also meet the requirements specified in directives, regulations, other rules imposed by the German Employers Liability Insurance Association and any other applicable national provisions in their current version in the countries of use.
- Objects can slide off the unit top or the unit can tip over when pushed.
- Remove any objects from the unit top before changing its location.

Gastronorm containers or dishes may fall out of the unit when it is pushed!

- Hold unit door closed while changing its location.

With the door closed, the unit can be tilted to an angle of 5° while standing still!

- Only cross sloping surfaces with an incline of less than 5°.
- If the unit is standing on a sloped surface, it must be secured by extra means, such as wheel chocks, in addition to applying the castor brakes to prevent it from rolling away accidentally.

- Avoid subjecting the castors to excessive load to minimise the risk of damage to the castors:
  - Do not move the unit when the castor brakes are applied.
  - Avoid impacts.
  - Do not traverse bumps or steps.
  - Do not traverse uneven floors.

- The unit should be pushed only, never pulled.
- When moving the unit, ensure that persons or objects in the path of the unit are not overlooked.
- If the person pushing the banquet trolley cannot see over it, a second person must walk in front of the unit when it is being pushed to allow the unit to be moved safely.

If you push with just one hand, this may prevent you from applying the brakes quickly enough if the unit is heavy!

- Always push the unit with two hands on the push handle rail.
- Two people (one at each side wall of the unit) are required to move the unit over ramps or recesses.
- Always bring the unit to its new location at a sensible speed (no faster than 3 km/h – equivalent to a slow walking pace). The person who moves the unit to its new position must always be capable of braking the unit in an emergency, even if loaded.

An additional person is always needed for safety reasons when the field of vision is limited, during complicated transport manoeuvres and while traversing ramps, hollows and inclined surfaces.
If the unit falls over during transport or is otherwise exposed to high stress loads/strong impacts that are clearly not within the unit's intended use, it must be checked and, if necessary, serviced by an authorised specialist refrigeration company before being put back into operation.
Suitably trained professionals can also carry out the check.

3.10 Cleaning and care

Cleaning and maintenance

- Disconnect the unit from the power supply before cleaning or maintenance work or replacing parts.
- Keep the mains and/or unit plug in a suitable place where it is protected from moisture, damage and dirt while carrying out work.

3.10.1 Mains plug

- Unplug the mains plug before cleaning the unit.
- Disconnect the unit from the power supply before cleaning or maintenance work or replacing parts.
- During these tasks, store the mains and/or unit plug in a suitable, dry place and protect against moisture, damage and dirt (insert mains plug in mains plug holder).

3.10.2 Electric shock due to short-circuit

Water penetrating into the unit can cause a short-circuit.

3.10.3 Hygiene

- You must comply with the specifications in Regulation (EC) no. 852/2004 and your national hygiene regulations.

The inside unit body is optionally available in hygiene type H1.

3.10.4 Cleaning interval

- Clean the unit thoroughly after each use.

The unit is equipped with a condensation water catch tray.

- Empty the condensation water catch tray daily in order to avoid overflowing and the related danger of slipping or damage to the floor.

3.10.5 Cleaning methods

- Use approved cleaning methods only.
- Do not use a steam jet unit or high-pressure cleaner.

3.10.6 Cleaning agents for synthetic parts

- Do not use scouring agents. Scouring agents scratch surfaces.
- Do not use the following cleaning agents or cleaning agents containing the following substances (material damage!):
  - Ethyl alcohol, isopropyl alcohol and higher alcohols
  - Acetone
  - Benzene
  - Turpentine
  - Acetic ester

3.10.7 Cleaning water

A danger of slipping exists if cleaning water runs out of the unit during or after cleaning!
Slipping on the spilled water can cause injuries.

- Thoroughly dry the unit after cleaning. Remove cleaning water from the base of the unit interior.
- Completely wipe up any water which runs out of the unit.

3.11 Maintenance

3.11.1 Castor brakes

- If the effectiveness of the brakes is not sufficient, have the defective castor replaced immediately by one of the following:
  - In-house, by B.PRO-trained professionals
  - External, B.PRO-trained customer service
  - B.PRO Service

3.11.2 Periodical electrical safety inspection

Have a qualified electrician carry out a periodical electrical safety inspection at least once every six months in accordance with the DIN VDE 0701 and DIN VDE 0702 series of standards.

3.11.3 Connection cable and mains plug

- Check the connection cable and mains plug for mechanical damage and signs of excessive deterioration at least once every six months in accordance with DGUV Regulation 3 (formerly BGV A3) or equivalent national regulations.

3.11.4 Unit doors

- Check the door seal for damage and excessive deterioration after each cleaning (visual inspection).

3.12 Repairs

3.12.1 Authorised persons

The unit may only be repaired by the following service points:

- In-house, by B.PRO-trained professionals
- External, B.PRO-trained customer service
- B.PRO Service
- For repairs to the refrigeration system: Specialist refrigeration company

Working on the refrigeration system

- Work on the refrigeration system is only to be executed by authorised, competent professionals who have been trained in the use of the refrigerant propane (R290)!

The refrigeration circuit may only be filled/refilled with propane (R290).

3.13 Personal protective equipment

- Wear personal protective equipment such as safety footwear, protective gloves and safety glasses to protect against the following hazards:
  - Hot surfaces
  - Hot steam and liquids
  - Danger of slipping
  - Sparks caused by static charge
- Also use the personal protective equipment specified by cleaning agent manufacturers; see safety data sheet for individual cleaning agents.

3.14 Standards and guidelines

The owner is responsible for compliance with the applicable standards, guidelines and safety regulations.

- Observe the applicable standards, guidelines and safety regulations.

3.15 Product marking

The unit is provided with a rating "Fault description" on page 38 plate.

ⓘ The warranty is voided if the rating plate is removed.

4 Additional information - Use in day-care centres and school catering

General safety instructions when dealing with children.

➨ Observe all safety instructions in the corresponding safety chapter (see Chapter, "Safety" on page 7) to ensure safe handling of this appliance in the presence of children.

ⓘ This additional information describes the assessable, additional residual risks as a result of the access of children/young people to the product.

⚠ Danger! Locking children in!

The appliance has compartments that are large enough for a child to climb into. Children who climb into empty tray transport trolleys cannot free themselves if the unit door is closed!

➨ **Never** leave the unit unattended.

➨ Always **check** to ensure that there are no children or animals in the compartments before commissioning or disposing of the unit.

➨ Place the empty transport trolleys with the unit door side toward the wall or place them in an area inaccessible to children.

⚠ Caution! Highly cooled eutectic plates!

Cooled eutectic plates are very cold. Contact with bare skin can lead to localised frostbite.

➨ Only handle cooled eutectic plates with protection (e.g.with gloves).

⚠ Caution! Danger of pinching and crushing due to opening/closing doors and hinges!

When opening, locking and closing the unit doors, limbs (e.g. fingers) can become trapped and crushed. This can lead to bruising.

➨ When opening and closing the appliance door, ensure that there are no limbs present in the door opening or door hinges.

➨ Open, lock and close unit doors carefully and without force.

General information and special dangers

Application

➨ The unit may only be used for the scope of application specified in these operating instructions.

Duty to supervise

➨ The unit must **not** be moved or operated without supervision.

The duty of supervision is essentially based on the applicable laws and regulations adopted by relevant national authorities, such as the legislator, the employer's liability insurance associations, regulations on a state or municipal level and/or other authorities.

Improper use as a toy

Improper use as a toy can cause the unit to tip and result in injury.

➨ Do **not** climb on the unit.

Improper use as a storage space

➨ The unit must **not** be used as a storage space for objects and/or living beings.

Improper use as a vehicle

➨ The unit must **not** be used as a vehicle or a means of transport.

➨ Do**not** lie under the unit.

The unit is very heavy and has a high potential momentum when moving. If the unit is misused as described above, it may cause injury as people can be run over or crushed, for example.

Castor brakes

The castor brakes have openings that are part of their technical design. If the castor brakes are applied without supervision, these openings can lead to crushing of extremities.
The appliance can be set in motion if a castor lock is opened inadvertently.

- After the appliance has been positioned at its intended location initially or after a change of location: Apply the available castor brakes.

5 Transport

5.1 Checking for/reporting transport damage

- The unit must be checked for damage incurred during transport immediately after delivery (visual inspection).
- Document any damage incurred during transport (description of defect) on the waybill in the presence of the carrier.
- Have the carrier confirm the damage (signature).
- Retain the unit and notify B.PRO of the damage, enclosing the waybill.
  – or –
  Do not accept the unit and return it to B.PRO via the carrier.

This procedure ensures that damage claims are handled correctly. The unit recipient must provide suitable proof if transport damage is reported at a later point in time.

5.2 Scope of delivery

The exact scope of delivery and the design of the appliance are documented in the delivery documents.

Standard scope of delivery

(1) B.PROTHERM stainless steel, cooled
(2) Operating instructions

5.3 Unpacking

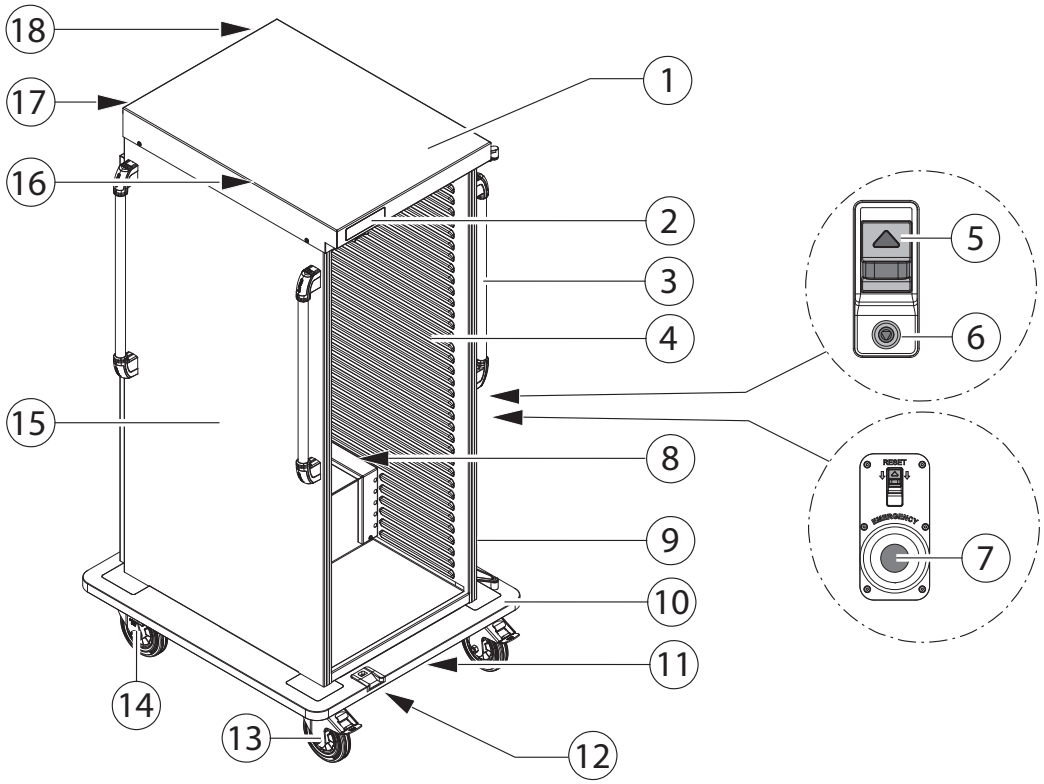
- Open the transport packing at the designated opening points. Do not tear or cut open.
- Check the scope of delivery.
- Remove any protective film on the inside and outside the unit

5.4 Disposing of packaging material

- Packaging materials are recyclable.
- Recycle packaging materials in a proper, environmentally responsible manner as per applicable statutory requirements

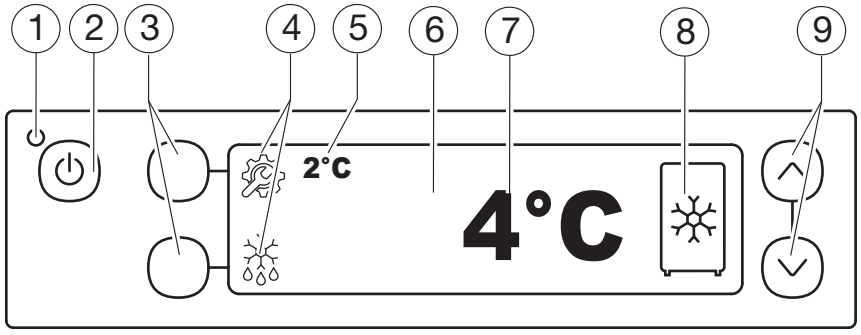
6 Overview

6.1 Unit overview



(1) Unit top surface (only for banquet model without stacking nubs)
(2) Temperature controller with integrated "ON/OFF" button
(3) Push handle
(4) Support ledges
(5) Door lock
(6) Door closer (optional)
(7) Panic button on the inside of door (phosphorescent)
(8) Machine compartment with air baffle and condensation water catch tray
(9) Unit door fully opened by 270° and locked
(10) Bottom plate with integrated bumper rail
(11) Draw bar (optional)
(12) Door unlocking mechanism for foot opening (optional)
(13) Steering castor with castor brake
(14) Fixed castor
(15) Device body in stainless steel as standard or optionally in powder-coated sheet metal
(16) QM Spot Sensor (optional)
(17) Mains cable with mains plug
(18) Mains plug retainer

6.2 Temperature controller – overview



Display	Details
(1) Operation indicator LED:	flashes as soon as the mains plug is inserted into the socket outlet and remains permanently lit when the unit is switched on
(2) "ON/OFF" button:	starts/stops cooling mode
(3) Multifunctional buttons:	The function to be selected is shown on the right-hand side of the display.
(4) Menu symbols:	enabled via the corresponding multifunctional button
(5) Target temperature display	
(6) Screen control:	This is where all relevant unit settings and information are displayed.
(7) Actual temperature display	
(8) Action symbol:	The active function is shown by an animated symbol.
(9) "UP/DOWN" button	used to navigate in the menu tree

The fan is also always in operation during cooling and defrosting.

6.3 Symbols – Overview

Symbol	Meaning
	Settings
	Cooling
	Defrosting

Symbol	Meaning
	Error/warning
OK	Confirm selection/setting
	Back

7 Commissioning

Prerequisites for operation

- ✓ Unit has reached room temperature and is dry
- ✓ No faults detected, no visible damage to unit
- ✓ No person or animal in the unit interior
- ✓ Castor brakes are locked
- ✓ Protective films removed
- ✓ Unit installed and stable
- ➨ If the unit was not transported upright, wait 2 hours before putting into use

7.1 Initial start-up

Checking unit setpoint temperature

The setpoint temperature to which the unit adjusts the temperature is set to +7 °C in the factory.

- ➨ Change the setpoint temperature if necessary.
- ➨ Chapter "Setting the setpoint temperature" on page 19.

7.2 Putting unit into operation

Positioning unit

- ➨ To ensure the best possible refrigeration of the food, note the following points when selecting where to place the unit:
  - – Operate the unit far away from any heat sources (such as radiators, ovens, sunlight).
  - – Operate the unit far away from equipment which develops large amounts of steam (e.g. dishwasher).
- ➨ Ensure that the refrigeration unit ventilation slits are not blocked by any objects (clear air outlet). Ventilation slits must be at least 10 cm from a wall when the refrigeration unit is switched on.
- ➨ Make sure that the condensation water catch tray is inserted above the machine compartment inside the unit.
- ➨ Move the unit into its designated location and lock the castor brakes.
- ↳ Chapter "Moving the unit to a new location" on page 25
- ➨ Before initial use, make sure the unit interior is in an absolutely hygiene condition.
- ➨ Wear personal protective equipment (e.g. safety footwear) to counteract static charge where necessary.

Plugging the unit into a socket outlet

- ✓ Unit and the external units connected to the optional unit socket outlets are disconnected
- ✓ Unit door closed

⚠ Danger! Fire hazard!

Fire hazard, in particular through naked flames, electric or static sparks generated by static charge, and hot surfaces.

- ➨ Avoid naked flames in the usable space or immediate vicinity of the unit.
- ➨ Avoid hot surfaces.
- ➨ In the event of static charge, appropriate countermeasures must be taken (e.g. use of personal protective equipment, antistatic castors or an antistatic conveyor).

⚠ Danger! Electric shock caused by short-circuit in external units!

A short circuit in an external unit connected to the main unit (e.g. due to overheating in the mains supply lead) can cause an electric shock if you come into contact with the main unit.

- ➨ Only connect unit to a mains socket outlet equipped with a residual-current device (residual-current circuit breaker, each phase with max. 16 A).

⚠ Caution! Damage to the unit's electrical system!
The unit electrical system may suffer damage if the unit is not designed for the available mains voltage or frequency.
- ➥ Before connecting, make sure that the mains voltage and frequency on the rating plate correspond with those for the mains socket outlet.

ⓘ The temperature control only works when the unit door is closed.

- ➥ Connect the mains plug to the socket outlet.
  The start screen will appear for approx. 3 seconds.
  The unit type will then be shown at the top of the display, the power board version on the bottom left and the display version on the bottom right.
  The operation indicator LED flashes.
- ➥ Clean the unit after the initial start-up.
- ↳ Chapter "Cleaning and care" on page 32

8 Handling and operation

General information

The general operating mode of the unit will be shown on the digital control display.
The active function is shown by an animated action symbol.
- ↳ Chapter "Temperature controller – overview" on page 17
- ↳ Chapter "Symbols – Overview" on page 17

8.1 Starting/stopping cooling mode (standby mode)

Starting cooling mode

- ✓ Unit connected to a socket outlet
- ✓ Unit door closed
- ➥ Press the "ON/OFF" button.
  The temperature display shows the actual temperature in the unit interior.
  The unit is in cooling mode.

Stopping cooling mode

- ➥ Press the "ON/OFF" button.
  The unit goes into standby mode.
  The temperature display shows OFF.

⚠ Caution! Possible impairment of food quality!
The quality of the food located in the unit may be impaired by a power failure, unit malfunctions or other interruptions during storage.
- ➥ Check whether the food quality has been impaired after the core temperature has increased.
- ➥ Dispose of food if necessary.

8.2 Setting the setpoint temperature

The setpoint temperature is set to +7 °C at the factory.
If the temperature is set too low, this will cause the refrigeration unit to run permanently (as will also happen when the ambient temperature is too high).
Possible consequences:
- Increased icing on the evaporator
- More frequent defrosting necessary
- Increased energy consumption

Displaying the setpoint temperature

The setpoint temperature can be seen on the display for approx. 3 seconds after the temperature has been changed/set using the “UP/DOWN” buttons.

Chapter "Temperature controller – overview" on page 17

Changing the setpoint temperature

- Use the “UP/DOWN” buttons to set the desired setpoint temperature.
  The setpoint temperature is displayed by pressing the “UP/DOWN” once.
  The setpoint temperature is changed by pressing the “UP/DOWN” button several times.
  The last value is adopted after 3 seconds.

8.3 Pre-cooling the unit

- In order to prevent the food in the unit from warming up, the unit should be pre-cooled for max. 30 minutes depending on the selected setpoint temperature and the ambient temperature.

Chapter "Starting/stopping cooling mode (standby mode)" on page 19

8.4 Setting the language

- Press the "Settings" button for approx. 3 seconds.
- Use the “UP/DOWN” buttons to navigate to the language menu.
- Press "OK" to confirm.
- Use the “UP/DOWN” buttons to select the desired language.
- Press "OK" to confirm.
  The language will be adopted in real time.

8.5 Plug start

If this function is enabled in the "Settings" menu, following the brief start-up phase of the controller, the unit will automatically start in its last saved setting after the mains plug is plugged back into the mains socket outlet.

- To enable the function, press the "Settings" button for approx. 3 seconds.
- Use the “UP/DOWN” buttons to navigate to the “Plug start” menu.
- Press "OK" to confirm.

8.6 Displaying operating hours

- Press the "Settings" button for approx. 3 seconds.
- Use the “UP/DOWN” buttons to navigate to the “Operating hours” menu.
- Press "OK" to confirm.

The operating hours are displayed

8.7 Key lock

The keypad lock prevents unauthorised access to temperature control, e.g. to change the setpoint temperature. If this function is enabled in "Settings", all display buttons are locked.

- To enable the function, press the "Settings" button for approx. 3 seconds.
- Use the “UP/DOWN” buttons to navigate to the “Key lock” menu.
- Press "OK" to confirm.
  All display buttons are locked.
- To disable this function, press and hold the “UP/DOWN” buttons for approx. 3 seconds.

8.8 Changing upper/lower temperature alarm

This setting significantly reduces error messages in daily operation. The default setting for the upper and lower temperature alarms is 5K (K = Kelvin).

- ➥ Press the "Settings" button for approx. 3 seconds.
- ➥ Use the “UP/DOWN” buttons to navigate to the “Temperature settings” sub-menu items.
- ➥ Press "OK" to confirm.
- ➥ Use the "UP/DOWN" buttons to navigate to the sub-menu item for the upper and lower temperature alarm.
- ➥ Press "OK" to confirm.
- ➥ Use the "UP/DOWN" buttons to set the desired value in Kelvin.
- ➥ Press "OK" to confirm.
  The values will be adopted in real time.

ⓘ Example:
A setpoint value of 4 °C is set. If the upper temperature alarm is set at +5K, the alarm will start from +10 °C outside of delay times.

Delay times for the temperature alarm are:

- Start delay:
  – If the setpoint temperature is not reached after 30 minutes, the temperature alarm will start in accordance with the upper or lower temperature value.
- Delay in control mode:
  – If the actual temperature deviates from the setpoint temperature for 10 minutes, the temperature alarm will start in accordance with the upper or lower temperature value.

8.9 Screen saver

The screen saver is activated after approx. 2 min.
Now only the actual temperature value is displayed with the corresponding action symbol. This gradually moves over the entire display.
The screen saver can be disabled by pressing a "multifunctional button" or "UP/DOWN" button once.

8.10 QM Spot Sensor (optional)

8.10.1 QM Spot Sensor with Bluetooth and Efento app for free

The serial number (= MAC address) of the QM Spot Sensor is printed on a rating plate. The QM Spot rating plate is located on the back of the device in the area of the power supply line, directly next to the B.PRO rating plate.

Install app

- ✓ Wireless network, Bluetooth enabled
- ➥ On a digital device, download and install the Efento app from the app store using the QR code (for Android or iOS) on the enclosed leaflet (Doc. No. 153081).

Use QM Spot Sensor permanently free of charge with Bluetooth and Efento app

- ➥ Start the app on a digital device and search for active QM Spot Sensors nearby.
- ➥ Use the serial number (= MAC address) of the QM Spot Sensor to display the value in the app.

The sensor readings are updated every 10 minutes.

The **measurement intervals** can be individually set in the Efento app settings. This may shorten the battery life.

ⓘ To change the sensor’s measurement intervals in the Efento app settings, the sensor’s reset pin is required. This is printed on the QM Spot rating plate.

8.10.2 Commissioning the QM Spot Sensor

Commissioning the QM Spot Sensor

The serial number (= MAC address) of the QM Spot Sensor is printed on a rating plate. The QM Spot rating plate is located on the back of the device in the area of the power supply line, directly next to the B.PRO rating plate.

ⓘ The use of the QM Spot Sensor's wireless connection to transmit measurement data to the server requires the conclusion of a paid contract with QM Software GmbH. B.PRO GmbH expressly disclaims liability for services provided by QM Software GmbH, in particular the availability of the services.

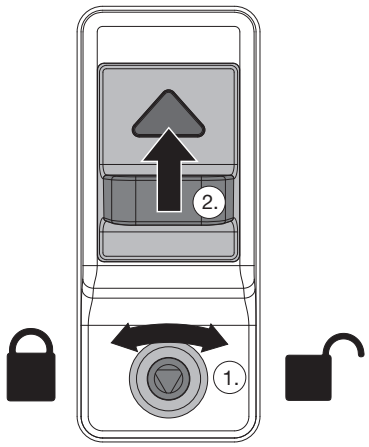
➨ Initiate the procedure for registering and commissioning the optional QM Spot Sensor using the QR code or the URL on the enclosed leaflet (Doc. No. 153081).
After successful registration, the user will be contacted by QM Spot and personally supported in the first steps.

Using QM Spot Sensor

➨ On a digital device with an internet connection, open the QM Spot Sensor login page in the browser and log in using the credentials you specified during registration.
➨ Select device. Please have the serial number of the QM Spot Sensor ready.
An overview of the data transmitted by the QM Spot Sensor appears in the browser.
➨ Select the corresponding sensor of the device based on the serial number (= MAC address).

8.11 Opening a unit door

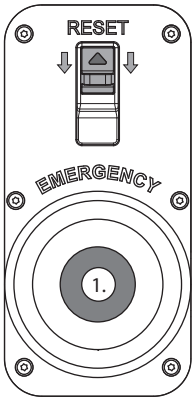
To keep the loss of cool air to a minimum, do not open the unit door unnecessarily while cooling is active. The door alarm starts if the unit door is left open for more than 10 seconds. Cooling and ventilation switch off. If the unit door is closed again, the cooling and ventilation will automatically switch on again after 3 minutes.



➨ Open the optional door closer (1.) and push the door lock (2.) up.
➨ Briefly hold it in this position while simultaneously opening the unit door.
➨ Open the unit door.
The cooling automatically switches off.

The unit door can be opened to approx. 270° and locked/ secured to the unit body by pressing lightly.

8.12 Panic button

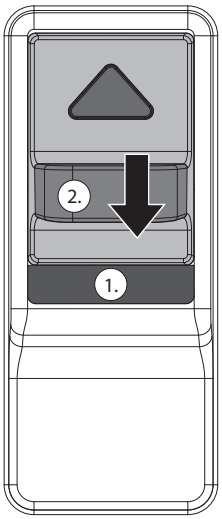


If a person is accidentally shut inside the unit body, they can free themselves by pressing the phosphorescent panic button (1.).
The unit door will open if the panic button on the inside of the door is pressed with a force of 70 newtons (corresponds to a force of 7 kg).

The unit door lock is then fully unlocked.
It must be re-tensioned before the unit door can be closed again.

Re-tensioning the unlocked lock

If the door lock is permanently in the "open" position, a colour area (1) will illuminate in red.
This means that the lock is completely unlocked. This happens if the "panic button" has been pressed on the inside of the door.



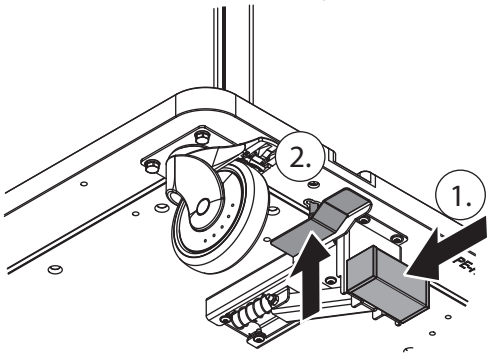
- ➥ Push the door lock handle (2) downwards.
- – Make sure you do not close the door.
  The lock will be audibly re-tensioned.
- ➥ Close door.
  The panic button inside the unit will no longer be illuminated in red.

⚠ Caution! Material damage

Closing the door while the lock is unlocked may result in damage to the unit.

- ➥ Push the door lock handle downwards until you hear it re-tensioning.

Convenient door opening with foot operation (kick latch) (optional)



- ➥ Press the foot lightly against the kick latch (1.).
  The unit door is unlocked using a metal rod (2.). The unit door springs open slightly.

8.13 Enabling/disabling door alarm

If this function is enabled in the “Settings”, the “Door open” warning message will appear on the display as soon as the door is opened. The unit will also switch itself off after a short time. The unit will restart as soon as the door is closed.

- ➥ Enable the function by pressing the "Settings" button for approx. 3 seconds.
- ➥ Use the “UP/DOWN” buttons to navigate to the “Door alarm active” menu.
- ➥ Press "OK" to confirm.
- ➥ Use the “UP/DOWN” buttons to navigate to “YES to enable” or “NO to disable”.
- ➥ Press "OK" to confirm.
  The door alarm is activated or deactivated depending on the selected setting.

8.14 Closing the unit door

- Pull the unit door out of the lock on the unit body.
- Close the unit door all the way to the body and press lightly.
  The fan switches on again.
  The refrigeration unit will switch on again after 1 minute once the temperature in the unit interior has reached the pre-set value.

8.15 Firmware version display

- Press the "Settings" button for approx. 3 seconds.
- Use the "UP/DOWN" buttons to navigate to the firmware version menu.
- Press "OK" to confirm.
  The firmware version will be displayed.
  The power board version is displayed on the left of the display and the display version on the right.

8.16 Service (with PIN)

The operator can modify advanced factory settings in this sub-menu.
The required PIN and corresponding instructions can be obtained from the BPRO Servicing team.
↳ Chapter "Repairs" on page 38

8.17 Loading the unit

- Always insert the food pre-cooled.

The unit is only suitable for keeping food cool, not for cooling food down.

- Always load the unit from bottom to top in order to keep the unit's centre of gravity as low as possible and thus minimise the risk of tipping.

A menu can be placed in the optional menu holder. The names of the food inside the B.PROTHERM stainless steel can then be written on the menu using a special pen.

- ✓ Unit pre-cooled
- ✓ Food pre-cooled for cold retention
- ✓ Food in Gastronorm containers is covered with lids
- ✓ Food on dishes is covered with cloches

⚠ Warning! Danger of tipping when centre of gravity shifts to the top of the unit!
If heavy Gastronorm containers are only loaded at the top of the unit, the centre of gravity of the unit moves upward. There is a risk of the unit tipping. A tipping unit can cause serious injuries.

- Always load the unit from the bottom up.
- Load the bottom section of the unit only if you half-load it.

⚠ Warning! Falling objects!
Objects placed on the top surface of the unit may fall and cause injury.

- Only place objects on the top surface of the unit using the intended containers.
- Only use containers and boxes intended for this purpose (see B.PRO price list).

- Open the unit door.
- Insert Gastronorm containers into the unit or place food on dishes on Gastronorm grates.
- Close the unit door.

8.18 Refrigerating food

- ✓ Unit connected to a socket outlet
- ✓ Unit door closed
- ✓ Device in cooling mode and not in standby (temperature display shows the actual temperature in the unit interior in cooling mode and the word OFF in standby mode)
- ➨ Insert eutectic plate(s) into the unit if necessary.
- ✓ Condensation water catch tray inserted below the bottom plate.
- ➨ In order to achieve the best possible cooling, do not open the unit door unnecessarily.
- ➨ Leave the cooling mode on until the food is removed from the unit again.
- ➨ Change the setpoint temperature if necessary.
- ↳ Chapter "Setting the setpoint temperature" on page 19

8.19 Removing food

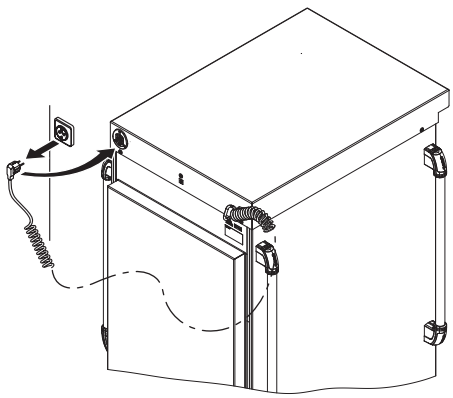
⚠ Warning! Danger of tipping when centre of gravity shifts to the top of the unit
If the lower Gastronorm containers are removed first, the centre of gravity of the unit shifts upward. There is a risk of the unit tipping.
- ➨ A tipping unit can cause serious injuries.
- ➨ Always unload the unit from the top down

⚠ Caution! Danger of slipping!
If water gets on the floor during loading or removing food, there is a risk of slipping. Slipping on the spilled water can cause injuries.
- ➨ Mop up excess water in the interior and water which has leaked onto the floor.

- ➨ Open the unit door.
- ➨ Remove Gastronorm containers or food on dishes.

The unit must be cleaned thoroughly after use.
- ↳ Chapter "Cleaning and care" on page 32

8.20 Moving the unit to a new location



- ➨ Press the "Cooling ON/OFF" button.
  The unit goes into standby mode.
  The temperature display shows OFF.
- ➨ Unplug the mains plug and insert it into the mains plug retainer.

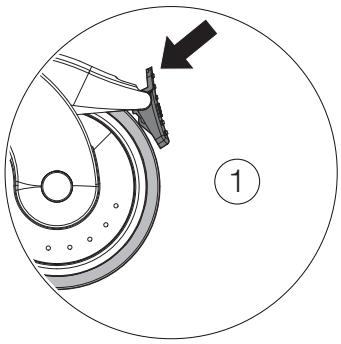
Change of location

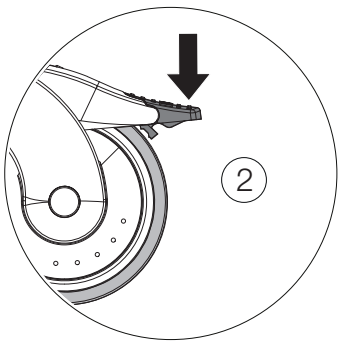
If the driving route is uneven, measures must be taken.
- ↳ Chapter "Traversing ramps, recesses, inclined surfaces" on page 26
- ✓ Do not place objects on top of the unit
- ✓ Unit door closed
- ✓ Condensation water catch tray drained
- ✓ Two people

⚠ Caution! Be careful not to pinch your foot!
You can pinch or injure your foot when releasing or locking the castor brakes.
- Be careful not to place your foot between the castor brakes and the bottom plate.

⚠ Caution! Restricted visibility!
When pushing the unit, you may overlook and injure a person in front of the unit. The unit or an object before the unit can be damaged due to limited field of vision.
- Make sure that another person walks ahead of the unit when pushing.
- Always use two hands when pushing the unit.

⚠ Caution! Injury and damage to property due to excessive speed!
If you move the unit too fast, you may not be able to brake it in an emergency.
The unit can tip over and cause injuries and damage to property.
- Do not push the unit at a speed greater than 3 km/h (equivalent to a slow walking pace).
- Push unit in such a way that you can brake whenever required.
- Two people should push the unit when the field of vision is limited, during complicated transport manoeuvres and while traversing ramps, hollows and inclined surfaces





- Release the castor brakes (1).
- Using both hands, carefully push the unit into position.
- Lock castor brakes (2).

8.20.1 Traversing ramps, recesses, inclined surfaces

- ✓ 2 people
- ✓ Refrigeration is switched off
- ✓ Power plug pulled and in mains plug retainer
- ✓ Unit door closed
- ✓ Condensation water catch tray drained

⚠ Warning! Risk of unit tipping over!
The unit can tip over when traversing a sloped surface.
- Never move the unit across a surface such as a ramp with an incline > 5°.
- With both hands on the rail of the unit push handle, carefully push the unit to its new location.

8.20.2 Change of location when used as a train with optional draw bar

Unit model with draw bar

- ✓ Users must be fully trained and have the appropriate certificate of competency for driving tugger trains
- ✓ Users are aware of the risks involved when using the units as a train and are able to assess them.
- ✓ Users wear safety footwear and other prescribed safety clothing if necessary
- ➨ Keep children away from the units.
- ➨ Supervise the tugger train at all times.
- ➨ If there is damage, secure the units against accidental use and have repairs carried out immediately by one of the authorised service points listed under Repairs.
- ➨ A maximum of four units may be coupled.
- ➨ Only pull units in the direction of the train while coupled together.
- ➨ Do not use faulty units as a train.
- ➨ Do not transport objects on top of the units (railing).
- ➨ Load the compartments of units from the bottom upwards.
- ➨ Lock/secure the compartment doors.

Use a suitable towing vehicle when changing location. Limitations in use generally arise based on the specific units used as a train (e.g. speed, turning curve, steering angle and/or the permissible attachment load).

- ➨ Select the height of the coupling on the towing vehicle to ensure that the draw bar of a coupled unit can be folded out horizontally (runs parallel to surface).
- ➨ do not exceed the specified speed of the units when used as a train.
  - – The speed restriction is max. 4 km/h (equivalent to a slow walking pace).

The units are safe from tipping over up to an angle of 5° when stationary.
While driving, this cannot be ensured due to a wide variety of influencing factors.

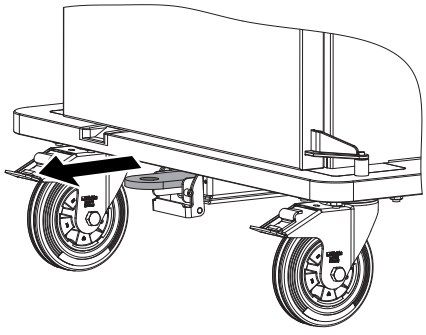
- ➨ Adjust driving style to on-site conditions.

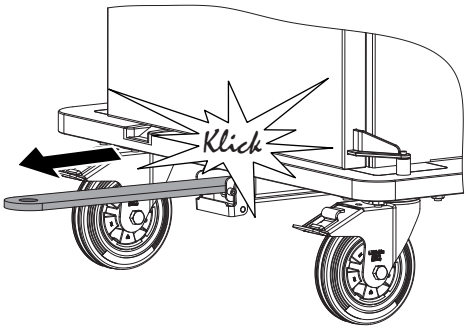
Draw bar function

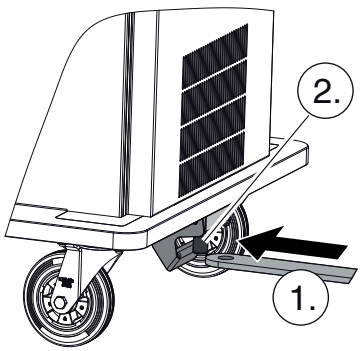
↳ Chapter "Functional principle" on page 7

Coupling units

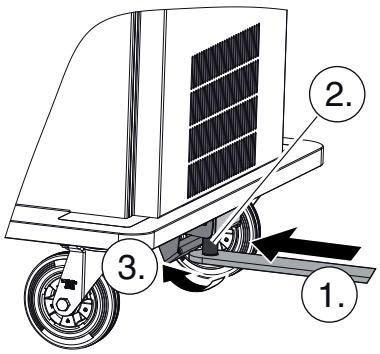
- ➨ Extend the draw bar by engaging it in the front hole until you hear it click into position.



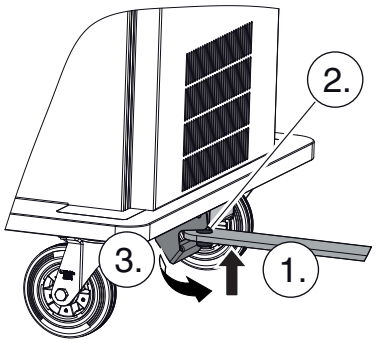




- ➨ Align the draw bar (1.) on the unit to the coupling pin (2.) on the unit to be coupled.

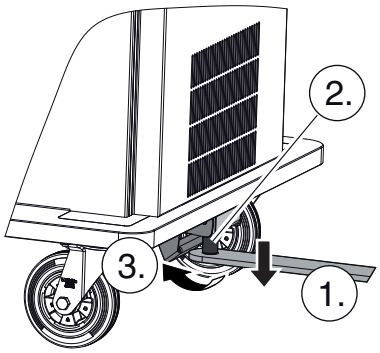


- Push the locking pin (3.) with the draw bar (1.) backwards and position it with the hole of the draw bar (1.) under the coupling pin (2.).

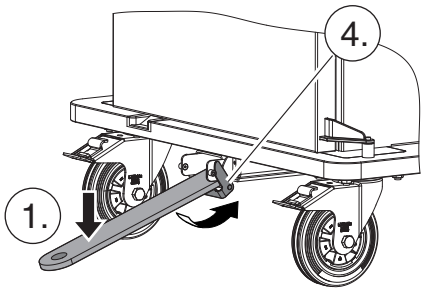


- Lift the draw bar (1.) upwards until the coupling pin (2.) slides into the draw bar hole (1.).
  The spring force automatically pushes the safety catch (3.) forward.
  The securing mechanism is active.

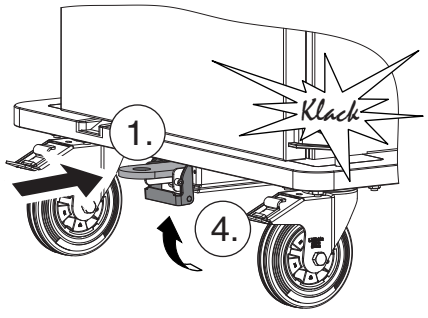
Decoupling units and stowing draw bar



- Push the safety catch (3.) back.
  The safety device is unlocked and the drawbar (1.) can be pulled downwards out of the coupling bolt (2.).



- Lower the draw bar (1.) to the ground.
  The safety catch (4.) on the draw bar mount is unlocked.



- Push the draw bar (1.) all the way in until you hear it click into position.
  The spring force automatically pushes the safety catch (4.) back into position.
  The draw bar is secured.

9 Shutting down

9.1 Shutting unit down

⚠ Caution! Mould growth in interior!
If the unit is taken out of operation or switched off for longer periods of time, mould may form or odours may be emitted in the interior.

- If the unit is taken out of operation or switched off for longer periods of time, leave the unit door open to allow the evaporator to dry.

⚠ Caution! Damage to the unit's electrical system!

- Unplug the mains plug only with the unit switched off, otherwise the unit electrical system and the mains socket outlet can be damaged.

- Switch off the unit with the "ON/OFF" button.
- Pull out the mains plug to disconnect the unit from the power supply.
- Only unplug the mains plug by the mains plug housing.
- Unplug the mains plug and store it in the mains plug retainer on the unit.
- Empty unit.
- Cleaning the unit.
- Close the doors.
- Move unit to a secure place and store.

10 Troubleshooting

Operation indicator LED does not illuminate, unit does not start

Cause	Measure
Mains plug is disconnected or not plugged in properly.	➨ Plug the mains plug into the socket outlet and ensure it fits properly.
Mains cable is damaged; e.g. a wire is broken (can also occur without external damage).	➨ Have a centre authorised to carry out repairs replace the mains cable. ↳ Chapter "Repairs" on page 38
Customer-supplied fuse (building fuse) is defective.	➨ Check customer-supplied fuse and replace it if necessary.
Unit electrical system is defective.	➨ Notify a centre authorised to carry out repairs. ↳ Chapter "Repairs" on page 38

The unit has external damage

Cause	Measure
Damage during transport, change of location or other external influences.	➨ Shut unit down. ➨ Secure the unit to ensure it cannot be started up accidentally. ➨ Place a notice on the unit which is clearly visible. ➨ Notify a centre authorised to carry out repairs. ↳ Chapter "Repairs" on page 38

Corrosion of stainless steel parts

Cause	Measure
Incorrect handling/care.	Notify a centre authorised to carry out repairs. ↳ Chapter "Repairs" on page 38 ➨ Ensure proper handling/care.

Temperature is displayed, but food is not kept sufficiently cool

Cause	Measure
Setpoint temperature is set too high.	➨ Set a lower setpoint temperature. ↳ Chapter "Setting the setpoint temperature" on page 19
Ventilation slits blocked.	➨ Remove objects from the refrigeration unit ventilation.
High ambient temperature.	➨ Move unit to cooler environment. – or – ➨ Have a refrigeration technician change the refrigeration parameters of the temperature control.
Evaporator in unit covered in ice.	➨ Defrost unit. ↳ Chapter "Defrosting unit manually" on page 35
Seal on unit door defective.	➨ Notify a centre authorised to carry out repairs. ↳ Chapter "Repairs" on page 38
Temperature control is irregular.	➨ Switch off the unit and unplug the mains plug. Return to operation after approx. 10 seconds. ➨ If this does not solve the problem and the causes we have already mentioned can be ruled out, notify an authorised repair company. ↳ Chapter "Repairs" on page 38
Refrigeration unit failed or damaged	➨ Notify a centre authorised to carry out repairs. ↳ Chapter "Repairs" on page 38
Unit electrical system faulty.	➨ Notify a centre authorised to carry out repairs. ↳ Chapter "Repairs" on page 38

Food temperatures vary significantly

Cause	Measure
Air baffle not used	➨ Use air baffle. ↳ Chapter "Dismantling the air baffle" on page 36

Increased condensation water in the condensation water catch tray

Cause	Measure
Door seal missing or damaged.	➨ Notify a centre authorised to carry out repairs. ↳ Chapter "Repairs" on page 38

"Temperature too high" error message on the display

Cause	Measure
High ambient temperature.	➨ Move unit to cooler environment. – or – ➨ Have a refrigeration technician change the refrigeration parameters of the temperature control.
Evaporator is covered in ice.	➨ Defrost unit. ↳ Chapter "Defrosting unit manually" on page 35
Refrigeration unit failed or damaged.	➨ Notify a centre authorised to carry out repairs. ↳ Chapter "Repairs" on page 38
Refrigeration unit does not switch off when setpoint temperature is reached.	➨ Use the "ON/OFF" button to switch the cooling off and on again. ➨ If the malfunction continues, notify a facility authorised to carry out repairs. ↳ Chapter "Repairs" on page 38

"Door open" error message on the display

Cause	Measure
Unit door is open.	➨ Close unit door as quickly as possible.

"Clean filter" error message on the display

Cause	Measure
Wire mesh filter behind the cooling slits is clogged.	➨ Use a vacuum cleaner to clean the clogged filter. ➨ Press "OK" to confirm.

"Sensor fault" error message on the display

Cause	Measure
The temperature sensor is not working properly or is faulty.	➨ Notify a centre authorised to carry out repairs. ↳ Chapter "Repairs" on page 38

Refrigerating capacity decreases and/or loss of refrigerant is detected

Cause	Measure
Leak in the cooling circuit.	➨ Do NOT operate lights or turn on any other potential sources of ignition (e.g. switches, lighters). ➨ Do NOT remove mains plug. ➨ Switch off unit at the mains switch. ➨ Open doors and windows. ➨ Notify B.PRO Service Department.

Error on display "CAN error"

Cause	Measure
CAN error is shown on the display.	➨ Use the "ON/OFF" button to switch the cooling off and on again. ➨ If the malfunction continues, notify a facility authorised to carry out repairs. ↳ Chapter "Repairs" on page 38

Fault in QM Spot Sensor (optional)

Cause	Measure
No signal.	➠ If the signal is lost, reconnect to the wireless network. ➠ If the fault persists, contact either QM Spot Service or a repair centre. ↳ Chapter "Repairs" on page 38
Battery is empty.	➠ Do not change the battery yourself. When replacing the battery, contact an authorised repair centre.

11 Cleaning and care

⚠ Caution! Danger of slipping!
There is a danger of slipping if cleaning water runs out onto the floor during or after cleaning. Slipping on the spilled water can cause injuries.
- ➠ Thoroughly dry the unit after cleaning.
- ➠ Remove cleaning water from the bottom of the unit interior.
- ➠ Completely wipe up cleaning water which runs out onto the floor.

11.1 Information on cleaning stainless steel

Corrosion-resistant stainless steel is a designation for extremely corrosion-resistant and hygienic steels.
The stainless steel currently used at B.PRO (AISI 1.4301) primarily consists of iron, chrome and nickel. The corrosion resistance in corrosion-resistant steel is provided by what is known as a passive layer, formed on the material surface when it comes into contact with oxygen. Damage to the passive layer caused by mechanical impact is automatically repaired if sufficient oxygen is present on the material's surface. The passive layer can be damaged due to the effects of certain aggressive agents. Such substances are also found in low concentrations in drinking water, one example being chloride. When water evaporates, it may produce a critical higher concentration of substances. Grease, limescale, starch and protein deposits can impair the formation or renewal of a passive layer.

The following substances may also cause or advance corrosion if they come into contact with stainless steel:

- Concentrated acids, halogens, such as chloride or bromide, and their salts, and seasoning containing cooking salts
- Acid vapours, which may form when industrial cleaners are used, for example
- Contact with other metals, such as steel or iron
- Contact with iron, such as iron contained in steel wool, chips from pipelines or water containing iron particles

Contact with the aforementioned substances must be avoided to maintain corrosion resistance.
Observe the following cleaning and care instructions.
- ➠ Stainless-steel surfaces must be kept clean, dry and open to the air at all times.

ⓘ **B.PRO recommends:**
Observe the additional instructions for stainless steel surfaces subject to heavy wear:
- ➠ Remove/dry water, moisture and water spots immediately.
- ➠ **Do not** allow water, moisture and spots of water simply to evaporate, do **not** allow them to dry out.
- ➠ Wipe to remove any visible deposits.
- ➠ Then wipe and rub the cleaned surface dry with a soft cloth.
- ➠ Do **not** cover the surface after drying.
- ➠ Treat the surface with DeepClean Stainless Steel.

Personal protective equipment

- ➠ Wear personal protective equipment (e.g. safety footwear, protective gloves, protective eyewear, etc.).
- ➠ Observe the cleaning agent manufacturer's instructions (cleaning agent safety data sheets).

11.2 Cleaning interval

➨ Thoroughly clean and dry the appliance after **each time** it is used.

11.3 Cleaning methods

➨ **Do not use** steam jet units, high-pressure cleaners, water sprayers or similar cleaning devices.
➨ Do not use pointed or sharp objects for cleaning.

Prescribed cleaning method for daily routine cleaning

- Wipe clean with a damp cloth
- Remove stubborn dirt with a brush (plastic or natural bristles).

ⓘ Any other cleaning methods to be used **must** be approved by B.PRO.

11.4 Cleaning agents

⚠ Caution! Material damage!
Stainless steel cleaning agents and abrasive cleaners scratch the surface of plastic parts.
➨ Use only cleaning agents and methods approved by B.PRO.
➨ Do not use any of the following cleaning agents or cleaning agents with the following ingredients on plastic parts:
  – Ethyl alcohol, isopropyl alcohol or higher alcohols
  – Acetone
  – Benzene
  – Turpentine
  – Acetic ester

Bringing stainless steel into contact with various substances can cause corrosion.
➨ Use only cleaning agents authorised by B.PRO.
➨ Never clean appliance parts/surfaces improperly (no abrasive cleaners, no pointed or sharp-edged objects, no cleaning agents containing solvents), as otherwise material damage may occur.
➨ Only clean appliance parts/surfaces with the authorised cleaning methods and agents.

The following cleaning agents are suitable for stainless-steel surfaces:

- Commercially available stainless steel cleaning agents without chlorides, such as *DeepClean Stainless Steel*
- Commercially available water-based cleaning agents which do not contain chlorides
- Use commercially available descaling agents based on organic acids or inorganic acids not harmful to stainless steel (such as acetic acid, citric acid, sulfamic acid, phosphoric acid); observe the safety data sheets for the cleaning agents.
- Soft cleaning cloth or damp microfibre cleaning cloth

A list of tested cleaning agents suitable for stainless steel is available from the German Swimming Pools Association (Deutsche Gesellschaft für das Badewesen e.V.) at www.baederportal.com (Reinigungsmitteldatenbank/Liste RE). Further information on cleaning is available on the website of the information office for stainless steel, in the "Publications" section: www.edelstahl-rostfrei.de

Cleaning agents NOT suitable for stainless steel surfaces:

- All cleaning agents that may contain chlorides or hypochlorite (e.g. decalcifiers made with hydrochloric acid, chlorine bleaches)

Cleaning agents suitable for other metal surfaces, powder-coated appliance parts as well as plastic and glass parts:

- Commercially available water-based cleaning agents
- Soft cleaning cloth
- B.PRO microfibre cleaning cloth (use with water only)
- Residue stains, especially grease splashes and accumulations of grease, can be removed with a 30% soft soap solution and the help of a brush with synthetic or natural brushes.
- Glass surfaces can be cleaned with commercially available glass cleaners.

Cleaning agents - NOT suitable for other metal surfaces, powder-coated appliance parts as well as plastic and glass parts:

- Stainless steel cleaning agents or other abrasive cleaning agents
- Floor cloth
- Solvent-based cleaning agents
- All cleaning agents that may contain chlorides or hypochlorite (e.g. decalcifiers made with hydrochloric acid, chlorine bleaches)
- Aggressive corrosion-inducing cleaning agents/disinfectants (such as those based on fluorinated silicic acid, phosphoric acid or hydrochloric and sulphuric acid)
- Pointed, sharp, metallic cleaning agents

Cleaning agents – suitable for eutectic plates (coolant accumulators) (optional)

- Commercially available water-based cleaning agents
- Moist microfibre cleaning cloth for cleaning after each use
- Brush (plastic or natural bristles) for cleaning stubborn soiling
- Industrial dishwasher with a maximum of + 90 °C (water and drying temperature)

Cleaning agents – NOT suitable for eutectic plates (coolant accumulators) (optional)

- Stainless steel cleaning agents or other abrasive cleaning agents
- Floor cloth
- Solvent-based cleaning agents
- All cleaning agents that may contain chlorides or hypochlorite (e.g. decalcifiers made with hydrochloric acid, chlorine bleaches)
- Aggressive corrosion-inducing cleaning agents/disinfectants (such as those based on fluorinated silicic acid, phosphoric acid or hydrochloric and sulphuric acid)
- Granule dishwasher

11.5 Cleaning the unit

ⓘ **B.PRO recommends:**

Before using chemical cleaning agents, always test their compatibility with the surface on a concealed area. This will prevent any unwanted discolouration or other reactions between cleaners and the surface.

- ➨ If mineral or metallic dust is picked up during cleaning, continuously rinse out the cleaning aids (such as brushes, micro-fibre cloths) so that traces of the dust particles cannot be deposited on the surface.
- ➨ You must thoroughly rinse the surface with clean water and dry after every use.
- ➨ Do not use integrated heating systems to dry surfaces under any circumstances.
- ➨ Stainless-steel surfaces must be kept clean, dry and open to the air at all times.

- ✓ Unit is switched off
- ✓ Unit disconnected from the power supply
- ✓ Mains plug stored in the mains plug retainer
- ✓ No food in unit
- ✓ Unit completely cleared out
- ✓ Unit has reached room temperature

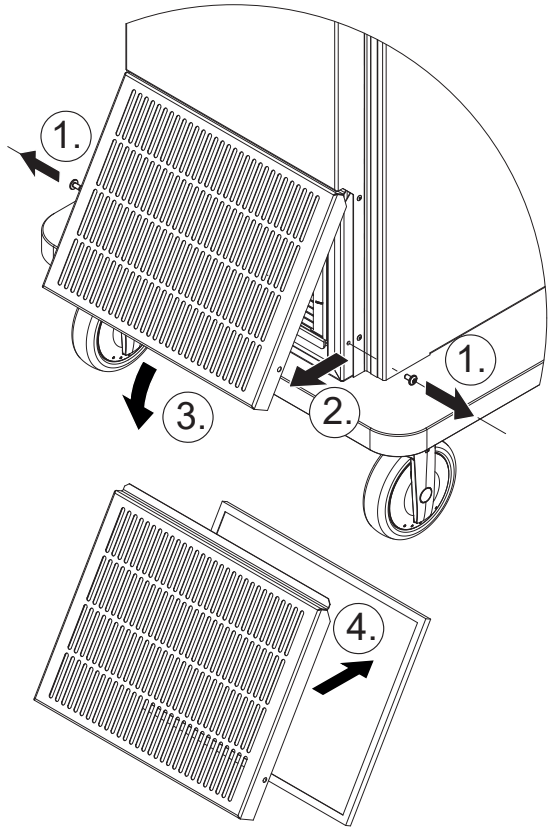
- ➨ Clean unit with cleaning methods and cleaning agents described above.
- ↳ Chapter "Cleaning methods" on page 33
- ↳ Chapter "Cleaning agents" on page 33
- ➨ After cleaning with a stainless steel cleaning agent, rinse with water and rub dry.

⚠ Warning! Water penetrating into the housing!

Water may penetrate into the housing when cleaning the connected unit and can cause a short circuit or an electric shock.

- ➨ Switch off the device with the "ON/OFF" button.
- ➨ To disconnect the device from the power supply, pull the power plug out of the socket at the power plug housing and store it in the power plug holder on the device.

11.6 Clean filter



- Check the filter for clogging every six months during cleaning.
- Clean the filter with a vacuum cleaner if required.
- If the dirt is very heavy, loosen the screws on the protective grille (1.).
- Pull the protective grille (2.) away from the bottom of the body.
- Remove the protective grille (3.) downwards.
- Remove the expanded metal filter (4.) from the protective grille.
- Vacuum the expanded metal filter and protective grille thoroughly.
- If necessary, clean the expanded metal filter and protective grille using the cleaning methods and cleaning agents described above.

Chapter "Cleaning methods" on page 33
Chapter "Cleaning agents" on page 33

11.7 Defrosting unit manually

The unit performs automatic defrosting for 15 minutes every 4 hours. Additional manual defrosting is only necessary if the actual temperature increasingly deviates upward from the set setpoint temperature.
Usually it will suffice to allow the unit to defrost (15 minutes) by starting manual defrosting.
It may occasionally be necessary to switch off the unit for defrosting for approx. 24 hours.
Both cases are described in more detail below.

Quick defrost

- To start defrosting manually, press and hold the "Defrost" button for approx. 3 seconds.
- Use the "UP/DOWN" buttons to set the value "YES".
- Press "OK" to confirm.
  The action symbol: "Defrost" appears.
  Cooling is stopped and defrosting starts.
  The fan helps with defrosting.
- To interrupt manual defrosting, switch off cooling to end defrosting mode.

Following the programmed defrosting period (15 minutes), the unit automatically switches back into the cooling mode.
Defrosting is now complete.

Long defrost

If defrosting does not resolve the problem, refrigeration must be switched off for an extended period.

- Press the "ON/OFF" button.
- Unplug the mains plug and insert it into the mains plug retainer.

Chapter "Shutting down" on page 29

- Leave cooling switched off for 24 hours.
- Depending on the amount of condensation water, drain the condensation water catch tray several times.

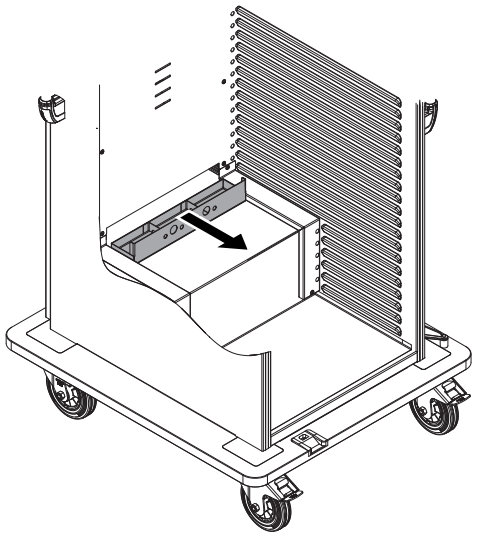
Chapter "Drain condensation water catch tray" on page 36

- Cleaning the unit.

Chapter "Cleaning and care" on page 32

11.8 Drain condensation water catch tray

The condensation water catch tray must be emptied daily and cleaned every two weeks.
The condensation water catch tray is located under the base plate and is removed and reinserted from the door side.

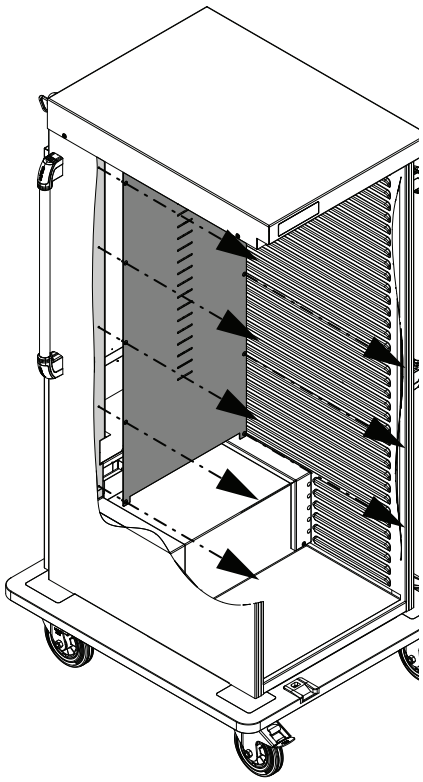


- Pull the condensation water catch tray out of the guide.
- Drain condensation water catch tray.
- If necessary, clean the condensation water catch tray using the cleaning methods and cleaning agents described above.
- Chapter "Cleaning and care" on page 32
- Chapter "Cleaning agents" on page 33
- After cleaning, slide the cleaning drawer all the way into the guide.

⚠ Caution! Danger of slipping!
Water overflowing from the condensation water catch tray and spilling onto the floor poses a slip hazard. Slipping on the spilled water can cause injuries.
- Empty the condensation water catch tray at least once a day; several times if a large quantity of condensation water accumulates.
- Wipe up any condensation water from the floor.

11.9 Dismantling the air baffle

For thorough cleaning, the air baffle can be removed and cleaned in a dishwasher. The proper functioning of the unit is only guaranteed if the air baffle is installed on the rear panel of the body interior.
Otherwise, the cooling air will not be distributed evenly and efficiently in the unit interior.



- Open the unit door completely.
- Unscrew ten screws to remove the air baffle from the rear panel and lift it out the front.
- Clean the air baffle.
- Screw the air baffle back on after cleaning.
- Close the unit door again.

12 Maintenance

ⓘ Regular maintenance prevents failure of the unit, extends its operating life and contributes to general value retention.

- Have a suitably trained professional maintain the unit on a regular basis.
- Also check the unlocking function and the luminosity of the phosphorescent interior door handle (panic button) during the regular maintenance of the refrigeration unit.
- Document the maintenance work that was performed and archive the associated documents accordingly.

⚠ Warning! Live components!

Live components may cause an electric shock if touched during maintenance work or when replacing parts on the connected unit.

- Switch off the device with the "ON/OFF" button.
- Pull out the mains plug to disconnect the unit from the power supply.
- Only unplug the mains plug by the mains plug housing.
- Unplug the mains plug and store it in the mains plug retainer on the unit.

12.1 Have regular maintenance performed on refrigeration unit

Leak test of the complete cooling circuit/refrigeration system at regular intervals of 12 months.

- Only have authorised, expert professionals trained to handle propane refrigerants (R290) carry out work on the refrigeration system.

The contracted refrigeration engineer must be able to demonstrate at least Category II expertise as specified in Regulation (EU) No. 517/2014 of the European Parliament and of the Council of 16 April 2014 on fluorinated greenhouse gases.

- Also clean the evaporator during such maintenance work.
- Only refill the refrigerant indicated on the rating plate. Observe the specified fill level.
- Always check the cooling circuit for leaks and corrosion and repair and restore if necessary.

12.2 Changing cooling parameters

The cooling parameters of temperature control (e.g. switching hysteresis) can be modified or reset as required by a specialist refrigeration company. Information on setting the temperature control is contained in the separate instructions for the temperature control included in the machinery compartment.

↳ Instructions for the temperature control

- If necessary, have a specialist refrigeration company change the cooling parameters.

12.3 Inspecting door seal

- Check the door seal for damage and excessive deterioration after each cleaning (visual inspection).
- Contact one of the following if there is damage:
  - In-house, by B.PRO-trained professionals
  - External, B.PRO-trained customer service
  - B.PRO Service

12.4 Checking seals on air baffle

- Regularly check the seals on the inflow and exhaust opening on the air baffle for damage (visual inspection).
- Contact one of the following if there is damage:
  - In-house, by B.PRO-trained professionals
  - External, B.PRO-trained customer service
  - B.PRO Service

12.5 Performing maintenance on seals

- Treat the unit's seals regularly (monthly) with a commercially available care product to prolong their service life.

12.6 Checking the castor brakes

- Check the castor brakes after every change of location to ensure effective working order.
- Lock castor brakes.
- Try to move the unit (do not use force!).
- If braking is inadequate, have the defective castor(s) replaced immediately by one of the following:
  - In-house, by B.PRO-trained professionals
  - External, B.PRO-trained customer service
  - B.PRO Service

12.7 Having periodical electrical safety inspection carried out

- Have a qualified electrician carry out a periodical electrical safety inspection at least once every six months in accordance with the DIN VDE 0701 and DIN VDE 0702 series of standards

12.8 Checking the connection cable and mains plug

- Check the connection cable and mains plug for mechanical damage and obsolescence at least every 6 months in accordance with DGUV Regulation 3 (formerly BGV A3) or corresponding national regulations.

13 Repairs

- Repairs **should only be carried out** by the following service centres:
  - In-house, by B.PRO-trained professionals
  - External, B.PRO-trained customer service
  - B.PRO Service

For repairs to the refrigeration system:

- Authorised specialist refrigeration company for the refrigerant propane (R290).

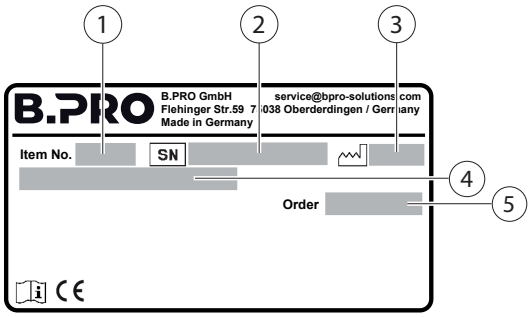
The contracted refrigeration engineer must be able to demonstrate at least Category II expertise as specified in Regulation (EU) No. 517/2014 of the European Parliament and of the Council of 16 April 2014 on fluorinated greenhouse gases.

13.1 Fault description

In addition to an exact description of the defect, B.PRO Service requires the following information from the rating plate:

- Article number
- Model
- Serial number
- Date of manufacture
- Production order number (optional)

ⓘ The rating plate is located on the rear of the device near the power supply.



(1) Article number
(2) Serial number
(3) Date of manufacture
(4) Model
(5) Production order number (optional)

- Defective components **may only** be replaced by the following service centres:
  - In-house, by B.PRO-trained professionals
  - External, B.PRO-trained customer service
  - B.PRO Service

13.2 Replacing components

Defective components, including the mains cable, may only be replaced by the following service points:

- In-house, by B.PRO-trained professionals
- External, B.PRO-trained customer service
- B.PRO Service

For repairs to the refrigeration system:

– Authorised specialist refrigeration company for the refrigerant propane (R290).

The contracted refrigeration engineer must be able to demonstrate at least Category II expertise as specified in Regulation (EU) No. 517/2014 of the European Parliament and of the Council of 16 April 2014 on fluorinated greenhouse gases.

13.3 Spare parts

The following information is required when ordering spare parts:

- Designation of spare part
- Article number
- Date of manufacture of the unit
- Quantity

↳ See the Service Information System on the Internet (www.bpro-solutions.com).

13.4 Address

B.PRO GmbH
Flehinger Straße 59
75038 Oberderdingen
Germany

Phone: +49 (0)7045 44 – 81416
Fax: +49 (0)7045 44 – 81508
E-mail service@bpro-solutions.com
Internet www.bpro-solutions.com

13.5 Without being commissioned

Warranty claims will only be accepted if the operator can provide proof of complete documentation of the maintenance work/repairs carried out.

ⓘ Repairs carried out by service centres not authorised by B.PRO invalidate the warranty.

14 Disposal

When disposing of old electrical or electronic appliances in regular municipal waste, specific contents in the unit may pose a hazard to the environment and people's health.
You must therefore never dispose of the unit with normal municipal waste but take it to a separate waste collection point for electrical appliances, such as a specialised disposal plant.

The unit is marked with this symbol in accordance with DIN EN 50419, Marking of electrical and electronic devices in accordance with Article 15(2) of Directive 2012/19/EU (WEEE) to indicate it requires special disposal.
You must also take into account other possible national regulations concerning disposal.

➨ **Do not** dispose of the appliance together with other commercial waste.
➨ Ensure that the unit and door locks can no longer be used prior to disposal (e.g. by cutting off the mains plug).
➨ Take the fully emptied unit to a recycling centre.
ⓘ You can obtain further information on disposal from your dealer or the B.PRO Service Department.
↳ "Address" on page 39

ⓘ The unit can be returned to B.PRO free of charge.

15 Technical data

ⓘ Depending on the model, a unit subject to these operating instructions may also have differing technical data. The binding information is provided on the rating plate or the specific order documents or drawings.

15.1 General data

Dimensions and weight (approximate)

Item	Designation	Length [mm]	Width [mm]	Height [mm]	Empty weight [kg]	Max. load [kg]
386609; 575203	BPT E 30 (24) C	590	821	1532	100	90
386610; 575204	BPT E 36 (30) C	590	821	1762	120	110
386621; 575216	BPT E 36 (30) C banquet	820	941	1795	155	200

** The load corresponds to the maximum permitted total load including all options and accessories.*

Load capacity

Item	Designation	GN1/2-100	GN1/1-100	GN2/1-100	GN1/2-65	GN1/1-65	GN2/1-65
386609; 575203	BPT E 30 (24) C	18	8	–	27	12	–
386610; 575204	BPT E 36 (30) C	22	10	–	33	15	–
386621; 575216	BPT E 36 (30) C banquet	–	22	10	–	33	15

Top surface loading

As a general rule, a load on the top surface is not permitted for a BPT 420/620 KB(R)UH

Top surface option	Model	Load [kg]
Raised strips for stack stability	BPT E 30 (24) C BPT E 36 (30) C	33
4-sided railing	BPT E 36 (30) C banquet	33

Spacing of support ledges

38.3 mm

15.2 Electrical data

Parameter	Values
Voltage	220–240 V, 1 N PE, 50-60 Hz
Max. power consumption in the unit	You will find specifications on the rating plate
Max. power consumption per socket outlet	You will find specifications on the rating plate

QM Spot Sensor, battery pack (optional)

Parameter	Values
Type	3 pcs. AA, lithium battery (Model: ER14505M)
Capacity	3x 2200 mAh
Voltage	3.6 V

Protection type

IP X5 (the unit is protected against sprayed water (nozzle) in accordance with DIN EN 60529.)

15.3 Environment

Ambient conditions – operation

Parameter	Values
Temperature	+15 °C to +38 °C
Relative humidity	without condensation

Ambient conditions – storage, transport

Parameter	Values
Temperature	–10 °C to +40 °C
Relative humidity	without condensation

Emissions

The workplace-specific noise level of the unit is less than 70 dB(A).

Materials

Parameter	Values
Material	18/10 chrome-nickel steel, powder-coated sheet metal, plastic
Electrical components	Cables, circuit boards, connectors Lithium battery (optional)
Insulating material	PUR foam panels

15.4 Refrigeration system

15.4.1 BPT E 30 (24) C and BPT E 36 (30) C

Parameter	Value
Medium	R290
Filling weight	0.046 kg
Cooling range	+2 °C to +10 °C
Climate class	4
Max. permitted operating pressure	26 bar
Sealing	Refrigeration system checked for leak tightness at factory
Defrosting	Automatic; manual when necessary
Refrigerating capacity	0.35 kW at: t_0 = –10 °C (evaporation temperature) t_u = +38 °C (ambient temperature)
Electric power consumption of refrigeration unit	0.27 kW
Cooling current consumption	1.8 A

15.4.2 BPT E 36 (30) C banquet

Parameter	Value
Medium	R290
Filling weight	0.06 kg
Cooling range	+2 °C to +10 °C
Climate class	4
Max. permitted operating pressure	26 bar
Sealing	Refrigeration system checked for leak tightness at factory
Defrosting	Automatic; manual when necessary

Parameter	Value
Refrigerating capacity	0.55 kW at: t_0 = –10 °C (evaporation temperature) t_u = +38 °C (ambient temperature)
Electric power consumption of refrigeration unit	0.42 kW
Cooling current consumption	2.8 A

16 Ordering information and accessories

Ordering information

Designation / Article	Article number / Document number
BPT E 30 (24) C	386609; 575203
BPT E 36 (30) C	386610; 575204
BPT E 36 (30) C banquet	386621; 575216
Operating instructions	154 903

Accessories

Designation / Article	Article number / Document number
Gastronorm containers	↳ B.PRO price list
Support crossbars	↳ B.PRO price list
B.PRO microfibre cleaning cloth	126 999
DeepClean Stainless Steel cleaning and care agent	511 895

17 Standards, guidelines, inspection seal

The unit is in compliance with the fundamental requirements specified in the applicable product standards in their latest version when it is delivered.

17.1 Directives for CE marking/EU declaration of conformity

Where applicable, the unit is in compliance with the fundamental requirements specified in the following regulations/guidelines in their latest version when it is delivered.

CE

- 1935/2004: Regulation on materials and articles intended to come into contact with food
- 2006/42/EC: Machinery Directive
- 2014/35/EU: Low Voltage Directive
- 2014/30/EU: EMC Directive
- 2011/65/EU: RoHS Directive
- 2014/68/EU: Pressure Equipment Directive

17.2 Rules, regulations

The following rules, regulations, German Employers' Liability Insurance Association rules and any other applicable provisions for countries of use must be observed in their latest version when handling and using this unit.

- EC No. 852/2004: Regulation on the hygiene of foodstuffs
- DGUV regulation 110-003: Kitchen industry
- DGUV Regulation 3: Accident prevention regulations for electrical facilities and devices

ⓘ You can obtain a copy of the EU declaration of conformity from the B.PRO Service/Sales Team on request.

18 Maintenance work - form to be completed

Unit model:	
Article number:	
Serial number:	

Date	Name legible in block letters	What was checked/serviced/ replaced/repaired?	Company stamp of the contracted company	Signature

Operating Instructions – Doc. no. 154903 BPT stainless steel, cooled V2.0 en - 2025/03

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75033 Oberderdingen
GERMANY
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CATERING SOLUTIONS