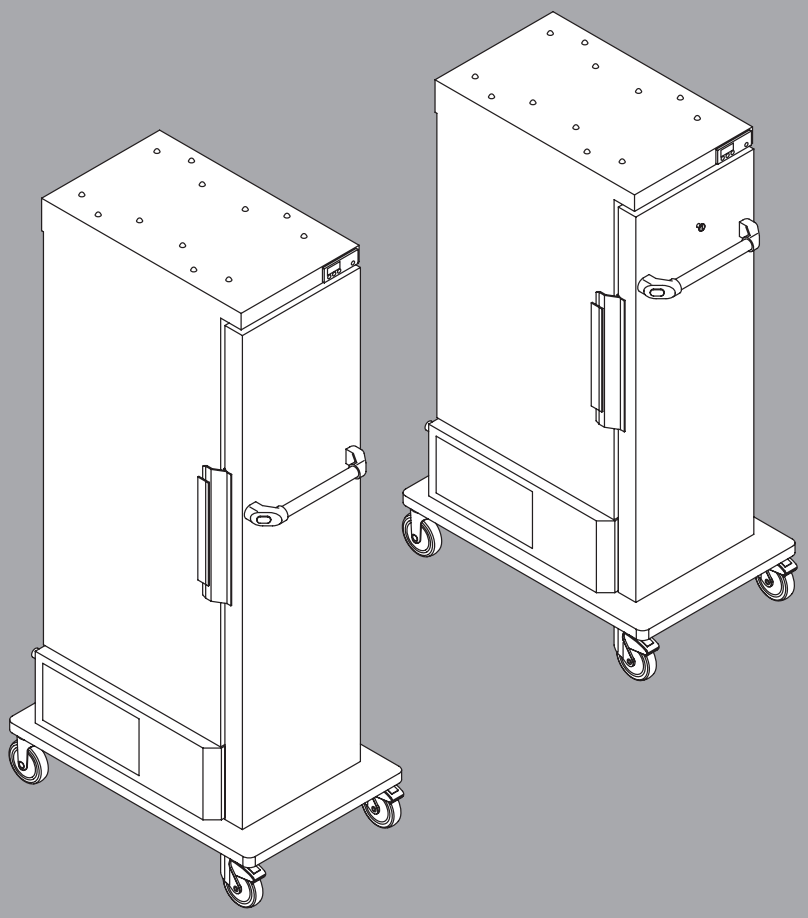
B.PRO
CATERING SOLUTIONS



B.PROTHERM STAINLESS-STEEL, COOLED BPT 1020 EUK/1220 EUK

Translation of the original operating instructions

General information

Copyright

Technical modifications

Subject to modifications for the purpose of technical improvement.

Product documentation

Translation of the original operating instructions; target group: operating personnel, kitchen directors.

Typographical conventions

☞ Important **note** on special features or special cases.

i **Explanatory information** in chapters or sections containing instructions.

↳ **Cross reference** to a chapter, section or external document.

✓ **Requirement** which must be fulfilled before the subsequent steps can be carried out.

➨ **Action** or activity which must be carried out.

Unit variant XYZ

A section identified in this way applies only to a particular **unit variant** or unit option.

Warnings

⚠ **Signal word!**

Type and source of danger!
Possible consequences of noncompliance with the warnings.
➨ Measures to avoid dangers and the consequences thereof.

The signal word (caution, warning, danger) informs of the level of danger.

Caution warns of possible light bodily injuries and damage to property.

Warning warns of possible serious bodily injuries.

Danger warns of possible highly severe/fatal bodily injuries.

Contents

About this product

Application

The cooled B.PROTHERM Stainless-Steel has been conceived for the following applications:

- Keeping food in Gastronorm containers or of food in dishes on Gastronorm grates cool
- Transporting food in Gastronorm containers to the serving position

The cooled B.PROTHERM stainless steel is not suitable for cooling down warm dishes and food or for permanently refrigerating food as a refrigerator. It must not be used as a room cooler.

The unit is particularly suitable for use in social facilities (clinics, retirement homes, day care centers), hotels, the food service industry (banquets, party services) and in cafeterias (canteens, dining halls).

It is forbidden to transport persons with or on the unit or its attachments. The unit must not be used as a substitute for a ladder or as a (children's) climbing frame (danger of tipping).

The unit may not be used to transport or store dangerous or toxic substances/liquids.

Conditions of use

Environment

The unit may be used when the ambient temperature is between +15 °C and +32 °C and at normal humidity (without moisture condensation).

Instruction of third parties

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

Product features

General

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, which can be removed if necessary, is equipped with a bent-clamp closure.

Synthetic B.PROTHERMs can be placed on the unit top on the stacking nubs.

As standard, the transportation mechanism of the cooled B.PROTHERM Stainless-Steel consists of two steering castors with locking brakes and two fixed castors.

The cooled B.PROTHERM Stainless-Steel is equipped with active convection cooling, whereby the cooled air is circulated in the unit interior with the aid of a fan.

The following unit versions are available:

- BPT 1020 EUK: 14 ledge pairs in unit interior
- BPT 1220 EUK: 20 ledge pairs in unit interior

Operation

The cooled B.PROTHERM Stainless-Steel can be loaded with Gastronorm containers of type GN 1/1. Their subdivisions can also be used by fitting slide-in frames and support crossbars (accessory). In addition, the cooled B.PROTHERM Stainless-Steel can also be loaded with food in dishes using Gastronorm grates.

The refrigeration parameters for cooling can be set exactly to the degree via a temperature regulator with a digital temperature display. LEDs on the control panel of the temperature regulator show the current operating status of the unit.

The temperature regulator registers deviations of the actual temperature from the setpoint temperature outside the preset temperature range and signals them via a visual alarm.

The temperature range of the temperature regulator lies between +2 °C and +15 °C.

A safety push handle allows easy movement of the unit on two fixed castors and two steering castors with locking brakes. The solid floor panel protects the unit from damage by impacts during transport.

The models of the cooled B.PROTHERM Stainless-Steel differ in their capacities:

- BPT 1020 EUK: Acceptance of max. 3 Gastronorm containers of type GN 1/1-200 and 1 Gastronorm container GN 1/1-100 (example)
- BPT 1220 EUK: Acceptance of max. 5 Gastronorm containers of type GN 1/1-200 (example)

Standard model

The cooled B.PROTHERM Stainless-Steel is equipped as follows (standard):

- Double-walled unit body made of stainless steel
- Distance between ledges: 57.5 mm
- Digital temperature adjustment
- Two steering castors with a locking brakes and two fixed castors
- Safety push handle on unit door
- Solid base plate with integrated impact protection

Options and accessories

The cooled B.PROTHERM Stainless-Steel is available with the following optional equipment:

- Menu card holder
- Slide-in frames and GN crossbars for variable use of GN containers
- Castor model available in different materials
- Eutectic plates
- Gastronorm grates
- Additional bumper rail on top surface (synthetic panel)
- Smooth top surface with 4-sided, stainless steel railing

Functional principle

Description

The cooled B.PROTHERM Stainless-Steel is equipped with active convection cooling. Convection cooling operates based on the following principle:

The evaporator of the refrigeratino system extracts heat from the air inside the unit. A fan circulates the cooled air inside the unit via the air baffle on the inside of the door.

This functional principle results in:

- Quick cooling of the unit interior
- Lower refrigeration temperature (+2 °C) than active contact cooling possible
- Even temperature distribution

The floor panel has a drainage facility for condensation water which collects in the condensation-water catch tray under the unit.

Safety

General information

The unit has been built using state-of-the-art technology. Accordingly, all the requirements necessary for safe operation have been fulfilled. Additional dangers do nevertheless exist when the unit is operating. The safety precautions and warnings in these operating instructions are there to help you protect yourself against these sources of danger.

Safety precautions

Thoroughly read and observe the safety precautions in this chapter.

The operator is responsible for the observance of the safety precautions in these operating instructions.

Warnings

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

Operating instructions

These operating instructions must be read carefully before you use the unit for the first time.

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

Keep these operating instructions in a location which is always accessible to operating personnel.

Cleaning and maintenance

For cleaning and maintenance tasks, or to replace parts, disconnect the unit from the power supply. During the work to be performed, keep the mains and/or unit plug in a suitable place and protect it from moisture, damage and dirt.

About this product

Application

The unit may only be used for the applications specified.

The operator is responsible for the appropriate and proper use of the unit.

Conditions of use

The unit is only to be operated under the appropriate environmental conditions.

The users of the unit must be instructed in its operation and must have read and understood these operating instructions.

⚠ Caution!

Damage and personal injury!
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.

Transportation

Upright transport position

Transport the unit in an upright position only.

If the unit was not transported upright, wait 2 hours before starting it up.

Transportation with a truck or delivery vehicle

The unit is only to be transported in a truck or delivery vehicle with a loading ramp. The loading ramp may not exceed an angle of inclination of 10°.

Secure the unit on all four sides to prevent it from shifting.

Secure the unit against vertical movement during transportation.

Use padded safety bars.

Just locking the brakes is insufficient transportation security.

Startup

Location

Never operate the unit next to equipment which develops large amounts of steam (e.g. dishwasher). The steam can cause moisture condensation on the unit.

If the unit is connected to the power the moisture film may cause a short-circuit or an electric shock.

Keep ventilation slits of refrigeration unit clear. Ventilation slits must be at least 10 cm from a wall with the refrigeration unit switched on. Blocked ventilation slits can lead to overheating and failure of the refrigeration unit.

Startup after a storage period

When the unit is brought from a cold storage room to a kitchen, moisture contained in the room air condenses on the surface.

If the unit is connected to the power the moisture film may cause a short-circuit or an electric shock.

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

Mains connection

The mains voltage and frequency listed on the rating plate must match the corresponding values of the electrical outlet.

The unit may not be used if the insulation on the power cable or the power plug is damaged.

Insert and remove power plug only while unit is switched off, as otherwise the unit electronics can be damaged.

Always unplug the plug at the power plug housing.

Operation

General information

The user must know the dangers involved in the unit and be able to assess them.

The unit is only to be used when it is in proper working order.

If damage is present, secure the unit against accidental use and have repairs carried out immediately at one of the following locations:

- In-house, by B.PRO-trained technician
- Externally, by B.PRO-trained customer service engineer
- B.PRO Service

Always secure the unit from rolling away by setting the locking brakes. The unit can cause injuries and damage to property if allowed to roll away accidentally.

When keeping food cool, only open the unit briefly to remove food.

Always keep lids on Gastronorm containers containing food. Always keep cloches over food on plates.

⚠ Caution!

Possible impairment of food quality!
If a power failure, unit malfunctions or other interruptions during storage or regeneration occurs, the quality of the food located in the unit may be impaired.

➨ After reducing the core temperature, check whether the food quality has been impaired and dispose of food if necessary.

Loading

To prevent extension of the center of gravity to the unit top, load unit from the bottom up when loading partially.

Food removal

To prevent the center or gravity from shifting to the unit top, always only remove Gastronorm containers and food in dishes from top to bottom.

Loading capacity of the unit top

Do not place items weighing more than 33 kg on the unit top.

Hygiene regulations

When keeping food cool, observe the relevant regulations on foodstuffs as well as the characteristics of the food in question.

Change of location

Remove any objects from the unit top before changing its location. Objects can slide off the unit top or the unit can tip over when pushed.

Hold unit door closed while changing its location. Otherwise Gastronorm containers or dishes can fall out of the unit when it is pushed.

With the door closed, the unit can be tilted to an angle of 5° while standing still. Only sloping surfaces with an incline of <5° may be crossed.

If the unit is on a sloped surface, it must be secured against rolling away with further measures (e.g. shims) in addition to locking the locking brakes.

To minimize the danger of damage to the castors, avoid overloading the castors:

- Do not move the unit when the locking brakes are locked
- Avoid impacts
- Do not traverse bumps or steps
- Do not traverse uneven floors

The unit is to be pushed only, never pulled.

When moving the unit, ensure that no persons or objects which are located in the way of the unit are overlooked.
If the person pushing the unit cannot see over it, a second person must walk in front of the unit when it is being moved to enable it to be moved forward safely.

Always push the unit with two hands on the tube of the push handle. Depending on the weight of the unit, if you push it with just one hand it is possible you would not be able to apply the brakes quickly enough.

Two people are required to move the unit over ramps or sunken areas (one at each end of the unit).

Do not lift the unit by the push handle. The removable door may move upward in the process.

Cleaning and care

Power plug

Unplug the power plug before cleaning the unit. Water seeping into the unit can cause a short-circuit. If this happens, there is a risk of electric shock.

Hygiene

The provisions of the hygiene guidelines 93/43/EEC as well as your national hygiene regulations must be complied with.

The inner unit body fulfills the requirements of the hygienic design H 1.

Cleaning frequency

Clean the unit thoroughly after each use.

The unit is equipped with an automatic defroster and a condensation-water catch tray (GN 1/3-40).

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

Cleaning methods

Use only approved cleaning methods.

Do not use a steam jet device or high-pressure cleaner.

Cleaning agent for synthetic parts

Do not use scouring agents. Scouring agents scratch the surface.

Do not use the following cleaning agents or cleaning agents containing the following substances (damage to material!):

- Ethyl alcohol, isopropyl alcohol and higher alcohols
- Acetone
- Cleaning benzene
- Turpentine
- Acetic ester

Cleaning water

Thoroughly dry the unit after cleaning. Remove cleaning water from the floor of the unit interior.

A danger of slipping exists if cleaning water runs out of the unit during or after cleaning.

Completely wipe up any water which runs out of the unit.

Maintenance

Locking brakes

Regularly check the effectiveness of the locking 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 technician
- Externally, by B.PRO-trained customer service engineer
- B.PRO Service

Unit door

Check the door seal for damage and aging after each cleaning (visual check).

Electrical safety: Re-inspection

At least once every six months, have a periodical electrical safety inspection carried out by a professional electrician in accordance with the DIN VDE 0702 series of standards.

Connection cable and power plug

At least once every six months check the cable and power plug for mechanical damage and signs of excessive aging in accordance with BGV A 3 or the corresponding national regulations.

Repairs

Authorized persons

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

- In-house, by B.PRO-trained technician
- Externally, by B.PRO-trained customer service engineer
- B.PRO Service

The warranty will be invalidated if the unit is repaired by anyone else.

Standards and guidelines

Observe the applicable standards, guidelines and safety regulations.

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

Transportation

Checking for/reporting on damage incurred during transportation

☞ It is imperative that the unit be checked immediately after delivery for damage incurred during transportation (visual inspection).

➨ Record on the waybill (description of defect) any damage incurred during transportation, doing so in the presence of the carrier.

➨ Have the carrier confirm the damage (signature).

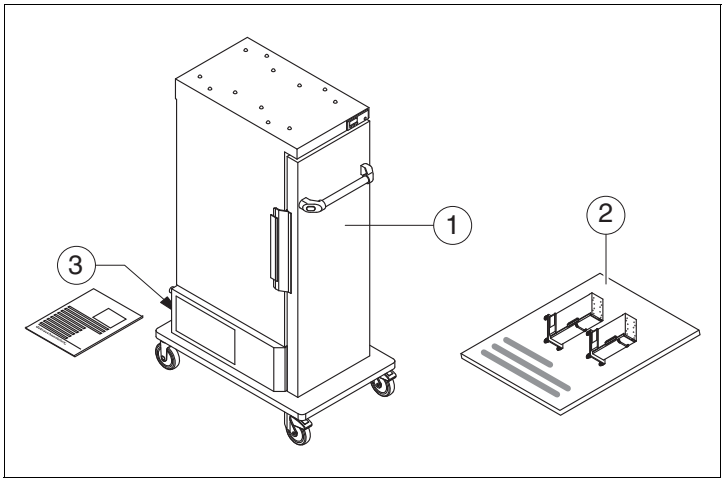
➨ Retain the unit and notify B.PRO of the damage, enclosing the waybill.

– or –

Do not accept the unit and return it to B.PRO via the carrier.

☞ This procedure will ensure correct processing of claims. If transportation damage is reported later the consignee must provide evidence of this.

Scope of delivery



(1) B.PROTHERM Stainless-Steel, Cooled
(2) Operating instructions
(3) Operating instructions on temperature regulator (behind revision panel on back of unit)

The exact scope of delivery and model of the unit is to be taken from the delivery documentation.

Unpacking

➨ Open the transportation packaging at the places provided. Do not rip or cut it!

➨ Check the scope of delivery.

➨ Remove any protective film on the inside and outside the unit.

Disposing of packaging material

☞ Packaging materials can be handed over to a recycling center after quoting the disposal contract number. If you cannot find the disposal contract number, it can be obtained by contacting B.PRO Service.

➨ Dispose of packaging material correctly and in an environmentally responsible manner.

Startup

Prerequisites for operation

- ✓ The unit has reached room temperature and is dry
- ✓ Unit cleaned
- ✓ Unit and the power plug have no known defects or visible damage
- ✓ The locking brakes are locked
- ✓ If the unit was not transported upright, wait 2 hours before putting into use

☞ If transported upright as specified, the unit can be started up immediately. If the unit was transported in another position, e.g. at an extreme angle, wait 2 hours before connecting the unit to the power supply.

Initial startup

Checking setpoint temperature of unit

☞ The setpoint temperature used by the unit's temperature regulator is set at the factory to +7 °C.

➨ Change the setpoint temperature if necessary.

↳ Subsection "Setting the setpoint temperature" on Page 14.

Connecting and switching on unit

Positioning the unit

➨ To ensure the best possible cooling of the food, note the following points when selecting where to place the unit:

- Operate the unit far away from possible 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 ventilation slits of the refrigeration unit are not covered by anything (unimpeded exit of air). Ventilation slits must be at least 10 cm from a wall with the refrigeration unit switched on.

➨ Make sure that the condensation-water catch tray is pushed in under the unit.

➨ Move the unit into its designated location and lock the brakes.

↳ Subsection "Move unit to a new location" on Page 19.

➨ Before switching on, make sure the unit interior is in an absolutely hygienic state.

Plug the unit into an electrical outlet

✓ The unit is switched off

✓ Unit door closed

⚠ Caution!

Damage to property due to improper mains connection!
If the unit is not rated for the mains voltage or frequency which is available, the unit's electronics may suffer permanent damage.

➨ Before connecting, ensure that the mains voltage and frequency listed on the rating plate match the corresponding values of the electrical outlet.

☞ Once the power plug has been inserted, the unit always switches into the operating mode it was in when the power plug was last removed.

☞ The temperature regulator only functions with the unit door closed. When the unit door is open, the display remains dark.

➨ Plug the power plug into the electrical outlet.
All positions of the temperature display and the temperature regulator LEDs will light up briefly.

If the unit was in refrigerating mode the last time the power plug was pulled, after a short time the temperature display will show the current temperature in the unit interior.

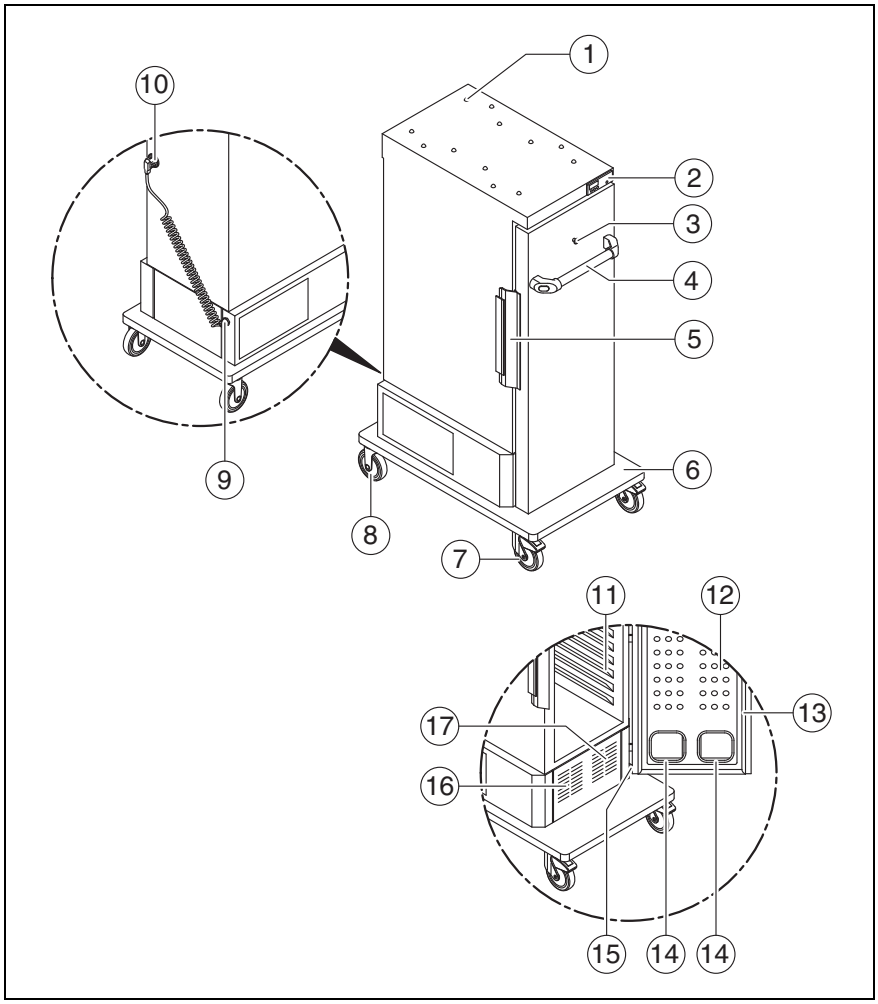
If the unit was in standby mode the last time the power plug was pulled, after a short time the temperature display will show the message `AUS` (OFF).

➨ Switch between standby mode and refrigeration as necessary.

↳ Subsection "Shut down refrigeration (standby mode) and restart it." on Page 18.

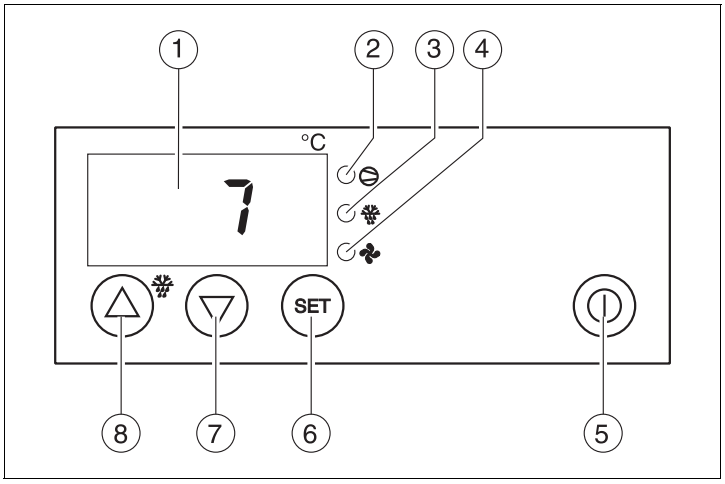
Operation

Unit overview



(1) Stacking nubs
(2) Temperature regulator with integrated On/Off switch
(3) Menu card holder (optional)
(4) Push handle
(5) Door lock
(6) Floor panel with integrated impact protection
(7) Steering castor with locking brake
(8) Fixed castor
(9) Power cable
(10) Power plug and power plug retainer
(11) Support ledge
(12) Air baffle
(13) Door seal
(14) Seals for ventilation air intake and blow-out opening
(15) Door stopper
(16) Blow-out opening
(17) Air intake opening

Temperature regulation – Overview



(1) Temperature display: In refrigeration mode this shows the actual temperature in the unit and when the "SET" button is pressed it shows the setpoint temperature.

(2) "Refrigeration unit in operation" LED: This is illuminated when the refrigeration system is running.

(3) "Defrosting" LED: Illuminates while defrosting.

(4) "Fan in operation" LED: This is illuminated when the fan is running.

(5) "Refrigeration ON/OFF" button: This starts or stops refrigeration.

(6) "SET" button: This allows you to change the setpoint temperature using the "UP" and "DOWN" buttons.

(7) "DOWN" button: Lowers the setpoint temperature and acknowledges a temperature alarm.

(8) "UP" button: Increases the setpoint temperature or starts manual defrosting when held longer (three seconds).

☞ The buttons must be held down for about one second and an action is triggered.

☞ When the refrigeration system is running, the "Refrigeration unit in operation" LED will be illuminated. When the set setpoint temperature is reached, the refrigeration switches off and the LED "Refrigeration unit in operation" goes out during this time.

☞ The fan is also always operating while the refrigeration is switched on.

☞ The fan will also run during defrosting, which starts either automatically or when the "UP" key is pressed. During this period, only the "Defrosting" and "Fan in operation" LEDs will be illuminated.

Setting the setpoint temperature

☞ The setpoint temperature is set to +7 °C at the factory. If a temperature is set this will result in the refrigeration unit running permanently (as will also happen when the ambient temperature is too high). Possible consequences:

- Ice will build up more quickly on the evaporator
- Defrosting necessary often
- More energy will be consumed

Displaying the setpoint temperature

✓ Unit connected to an electrical outlet

✓ Unit door closed

➨ Press and hold down the "SET" button.
The temperature display will now show the setpoint temperature which has been set.

Changing the setpoint temperature

✓ Unit connected to an electrical outlet

➨ Press and hold down the "SET" button.
The temperature display will now show the setpoint temperature which has been set.

➨ Use the "UP" button to raise the setpoint temperature.

– or –

Use the "DOWN" button to lower the setpoint temperature.

☞ If you keep pressing the "UP" or "DOWN" buttons, the temperature setting will change continuously. The rate of change increases when the "UP" or "DOWN" button is pressed for a longer period of time.

Defrosting the unit manually

☞ The unit performs automatic defrosting for 30 minutes every 6 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 (30 min.) 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.

☞ The condensation-water catch tray must be emptied daily.

↳ Subsection "Empty the condensation water catch tray daily and clean it every two weeks" on Page 27.

➨ To start defrosting manually, press the "UP" button for approx. 3 seconds.
Refrigeration is stopped and defrosting is started. The fan continues to run. The "Defrosting active" and "Fan in operation" LEDs will light up.

☞ Defrosting is helped by the fan.

☞ To interrupt manual defrosting, it must be ended via the On/Off switch for cooling.

☞ After the preset time for defrosting (30 min.), the unit automatically switches back to cooling mode. Defrosting has now been completed.

☞ If defrosting is unsuccessful, refrigeration must be interrupted for a longer time. The procedure to follow in this case is described below:

- Unplug the power plug and insert it into the power plug retainer.
  ↳ Chapter "Shutting down" on Page 22.

  – or –

  Press the "Refrigeration ON/OFF" button.
  The unit switches into standby mode. The temperature display will now show AUS (OFF).
- Leave cooling switched off for **24 hours**.
- The condensation-water catch tray must be emptied several times depending on the amount of condensation water produced.
- Clean the unit.
  ↳ Subsection "Cleaning the unit" on Page 27.

Acknowledging temperature alarm

☞ After cooling is activated or the unit door is closed, no temperature overshoot or undershoot of the setpoint is detected for 60 minutes to prevent an alarm indication from arising during the pre-cooling phase.

☞ If the actual temperature deviates from the setpoint by a certain amount (±7 °C), this temperature overshoot/undershoot is registered by the temperature regulator. The temperature display begins to flash (visual alarm) if the actual temperature is outside the specified temperature range (±7 °C) around the setpoint for longer than 60 minutes.

- Acknowledge the temperature alarm with the "DOWN" button.
- Clarify the cause of the temperature alarm, e.g. icing-up of the evaporator.
  ↳ Chapter "Help in the event of problems" on Page 23.
- Initiate suitable measures, e.g. defrosting.
  ↳ Chapter "Help in the event of problems" on Page 23.
  The temperature display stops flashing after a permissible temperature value is reached.

Pre-cooling the unit

☞ To prevent foodstuffs in the unit from being warmed up, the unit must be precooled for a maximum of 30 minutes depending on the selected setpoint temperature and on the ambient temperature.

✓ Condensation-water catch tray pushed in under the unit as far as the stop

✓ Unit door closed

- Approx. 30 minutes before putting food in, plug the power plug into the electrical outlet.

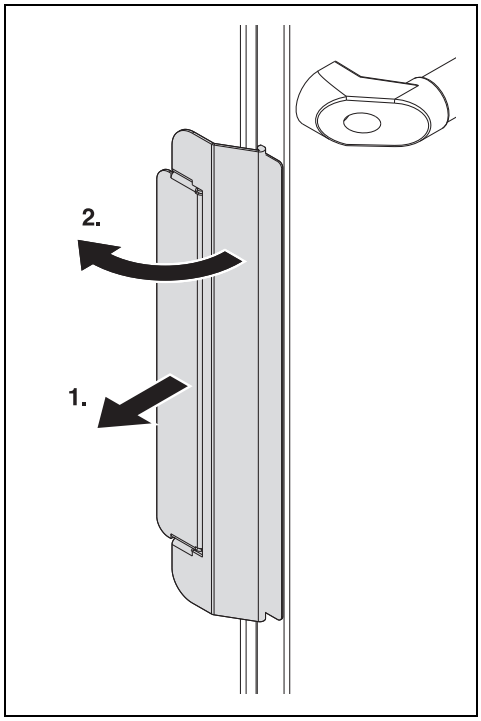
- If the unit is in standby mode (OFF appears in the temperature display), start refrigeration by pressing the "Refrigeration ON/OFF" button.
  The temperature display will now show the current temperature in the unit interior.
  The unit interior will now be cooled down.
  As soon as the set setpoint temperature is reached, the cooling unit switches off and the operation indicator LED "Refrigeration unit" goes out. The fan remains in operation.

Opening unit door

☞ To keep the loss of cool air to a minimum, do not open the door unnecessarily while cooling is active.

☞ If the door is opened during cooling, cooling and ventilation are switched off automatically and remain off as long as the door stays open. The temperature display and all LEDs go out.

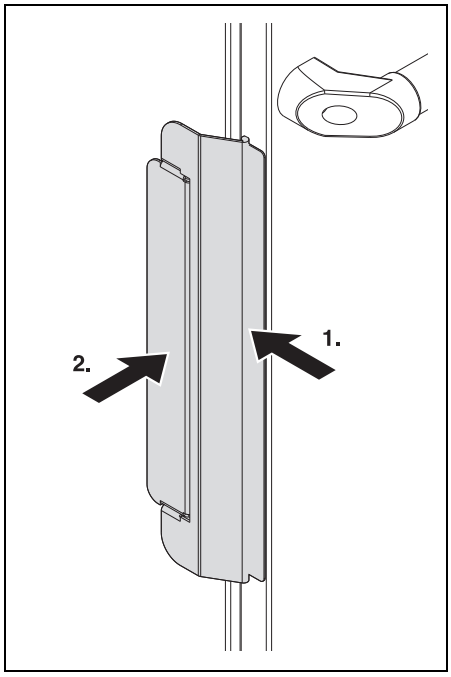
➨ Open the tension handle (1.) and fold it against the side wall (2.).



➨ Open the unit door.
The refrigeration switches off automatically.
The unit door can be opened up to an angle of 150°. A door stopper prevents the door from striking against the body.

Closing the unit door

- ➥ Close unit door to just in front of the unit body.
- ➥ Hook in tension handle (1.) and close (2.).



The fan switches on again.

The refrigeration unit switches on again after 1 minute when the temperature in the unit interior has risen by the preset amount.

Loading the unit

☞ Always insert the food pre-cooled. The unit is only suitable for keeping food cool, not for cooling food down.

☞ A menu card can be placed in the optional menu card holder. The food contained in the B.PROTHERM Stainless-Steel can be written on this card with a special pen.

☞ Always load the unit from bottom to top to ensure that the unit's centre of gravity is kept as low as possible.

- ✓ Unit precooled
- ✓ Food pre-cooled for refrigeration
- ✓ Food is located in Gastronorm containers with covers
- ✓ Food in dishes covered with cloches

⚠ Warning!

Danger of tipping when center of gravity is at the top of the unit!
If heavy Gastronorm containers are only loaded in the upper area of the unit, the unit's center of gravity shifts upward. There is a danger of the unit tipping over. A tipping unit can cause serious injuries!

- ➥ Always only load the unit from the bottom up.
- ➥ For partial loading, only load the bottom area of the unit.

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

Keeping food cool

ℹ The unit can keep food cold for an extended period of time even if it is unplugged, as the unit is well insulated. The unit fulfills the specifications of Thermal Class B pursuant to DIN EN 12571.

✓ Unit connected to an electrical outlet

✓ Unit door closed

✓ Unit in refrigeration mode and not in standby-mode (temperature display shows actual temperature in unit interior; `OFF` is displayed in standby mode)

✓ Eutectic plate(s) inserted in the unit if necessary.

✓ Condensation-water catch tray pushed in under the floor panel as far as the stop

➨ To achieve the best possible refrigeration, do not open the unit door unnecessarily.

➨ Leave refrigeration switched on until the food is removed from the unit gain.

➨ Change the setpoint temperature if necessary.

↳ Chapter "Setting the setpoint temperature" on Page 14.

Shut down refrigeration (standby mode) and restart it.

ℹ Refrigeration can be interrupted with the "Refrigeration ON/OFF" button (standby mode).

➨ Press the "Refrigeration ON/OFF" button.

The unit switches into standby mode. The temperature display will now show `AUS` (OFF).

➨ To restart refrigeration, press the "Refrigeration ON/OFF" button again.

The temperature display will show the current temperature in the unit interior again.

The unit is now in refrigeration mode.

Removing food

⚠ Warning!

Danger of tipping when center of gravity is at the top of the unit!
If the lower Gastronorm containers are removed from the unit first, the unit's center of gravity shifts upward. There is a danger of the unit tipping over. A tipping unit can cause serious injuries!

➨ Always only unload the unit from the top down.

➨ Open the unit door.

➨ Remove Gastronorm containers of food in dishes.

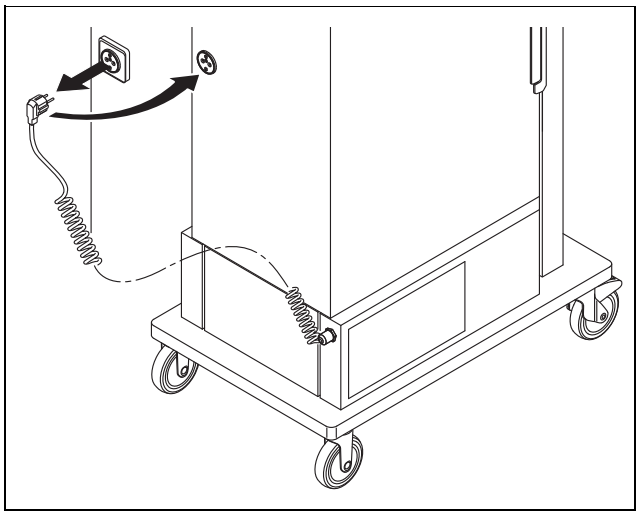
☞ The unit must be cleaned thoroughly after use.

↳ Chapter "Cleaning and care" on Page 26.

Move unit to a new location

Switching the unit off

- Press the "Refrigeration ON/OFF" button.
  The unit switches into standby mode. The temperature display will now show aus (OFF).
- Unplug the power plug and insert it into the power plug retainer.



Change of location

☞ If the driving route is uneven, measures must be taken.
↳ Chapter "Traversing ramps, recesses and slanted surfaces" on Page 21.

- ✓ Do not place objects on top of the unit
- ✓ Unit door closed
- ✓ Condensation-water catch tray emptied
- ✓ Two people

⚠ Caution!

Be careful not to jam your foot!
Your foot can be pinched and injured when you release or lock the locking brake.

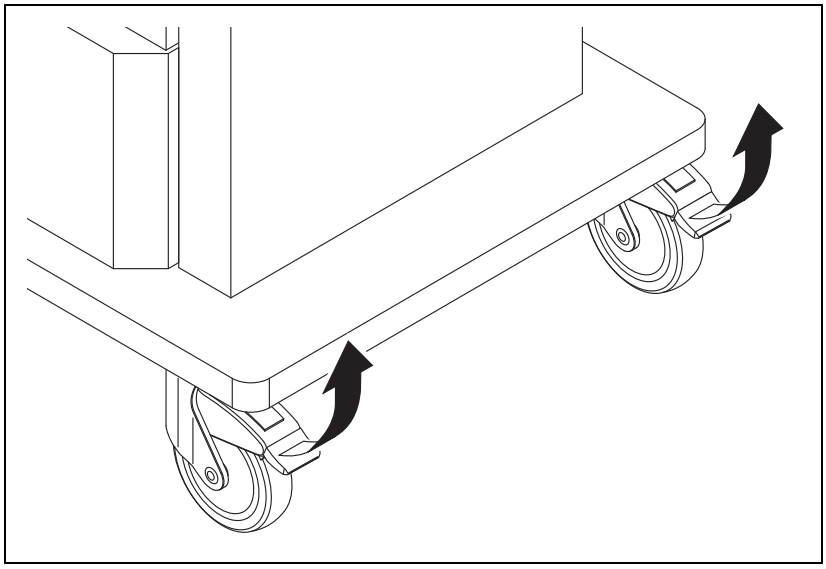
- Be careful not to place your foot between the locking brake and the floor panel.

⚠ Warning!

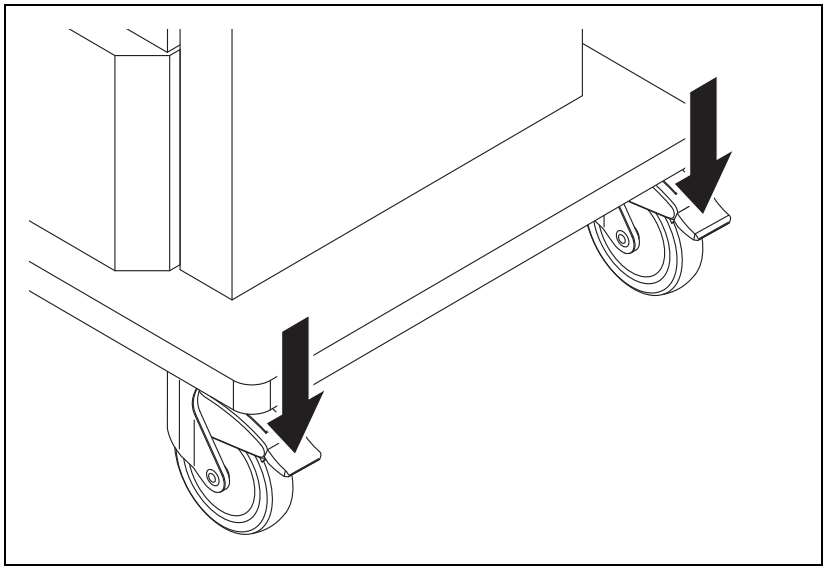
Limited visibility!
When pushing the unit, a person in front of the unit can be overlooked and injured. The unit or an object before the unit can be damaged due to limited visibility.

- Make sure that another person walks ahead of the unit when pushing.
- Always push the unit using both hands.

- Release the locking brakes.



- With both hands on the rail of the unit push handle, carefully push the unit to its new location.
- Lock the locking brakes.



Traversing ramps, recesses and slanted surfaces

- ✓ Refrigeration is switched off
- ✓ Power plug pulled and in power plug retainer
- ✓ Unit door closed
- ✓ Condensation-water catch tray emptied
- ✓ Two people

⚠ Warning!

The unit can tip!
The unit can tip over when traversing a slanted surface.

- ➨ Never move the unit across a surface (e.g. ramp) with an incline >5°.

- ➨ With both hands on the rail of the unit push handle, carefully push the unit to its new location.

Shutting down

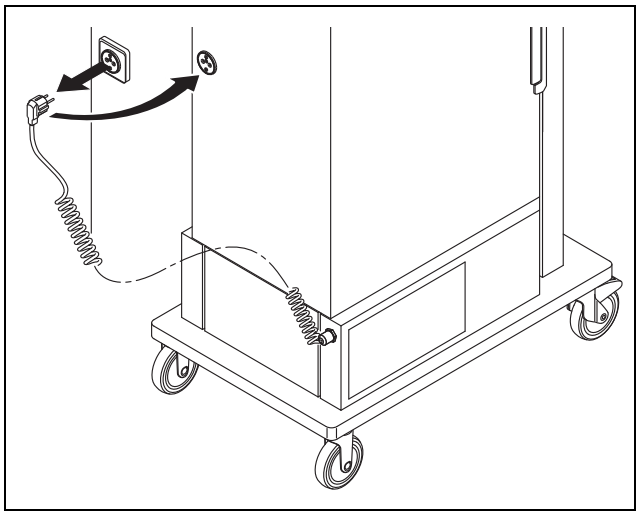
Shuttiing unit down

⚠ Caution!

Risk of mould!
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 door open to allow the evaporator to dry.

- Switch off refrigeration.
  ↳ Subsection "Shut down refrigeration (standby mode) and restart it." on Page 18.
- Unplug the power plug and insert it into the power plug retainer.



Help in the event of problems

Temperature display does not light up with unit door closed

Cause	Action
Power plug is unplugged.	➨ Plug the power plug into the electrical outlet.
Power plug is damaged; a wire is broken, for example (can also occur without external damage).	➨ Have power plug replaced by a facility authorized to carry out repairs. ↳ Chapter "Repairs" on Page 33.
Customer-accessible fuse (household fuse) is defective.	➨ Check the customer-accessible fuse and replace it if necessary.
The unit electronic system is defective.	➨ Notify a facility authorized to carry out repairs. ↳ Chapter "Repairs" on Page 33.

Temperature display illuminates, but food is not kept sufficiently cold

Cause	Action
The setpoint temperature is set too high.	➨ Set a lower setpoint temperature ↳ Subsection "Setting the setpoint temperature" on Page 14.
Ventilation slits blocked.	➨ Remove objects in front of the ventilation of the refrigeration unit.
High ambient temperature.	➨ Move the unit to a cooler location. – or – Have a refrigeration technician change the refrigeration parameters of the temperature regulator.
Evaporator in unit covered with ice.	➨ Defrost the unit. ↳ Subsection "Defrosting the unit manually" on Page 14.
Seal on unit door defective.	➨ Notify a facility authorized to carry out repairs. ↳ Chapter "Repairs" on Page 33.
Air baffle not mounted on inside of door.	➨ Mount air baffle. ↳ Subsection "Unhooking air baffle" on Page 28.
Convection revision panel not mounted.	➨ Mount convection revision panel. ↳ Subsection "Cleaning convection revision panel" on Page 29.

Cause	Action
Temperature regulator is in an irregular condition.	➨ Pull the power plug and reinsert it after approx. 10 seconds. ➨ If this does not solve the problem and the causes we have already mentioned can be ruled out, notify an authorized repairs facility. ↳ Chapter "Repairs" on Page 33.
Refrigeration unit failed or damaged.	➨ Notify a facility authorized to carry out repairs. ↳ Chapter "Repairs" on Page 33.
The unit electronic system is defective.	➨ Notify a facility authorized to carry out repairs. ↳ Chapter "Repairs" on Page 33.

Food varies greatly in temperature

Cause	Action
Air baffle not mounted on inside of door.	➨ Mount air baffle. ↳ Subsection "Unhooking air baffle" on Page 28.
Convection revision panel not mounted.	➨ Mount convection revision panel. ↳ Subsection "Cleaning convection revision panel" on Page 29.

Increased amount of condensation water in condensation-water catch tray

Cause	Action
Door seal is missing or damaged.	➨ Notify a facility authorized to carry out repairs. ↳ Chapter "Repairs" on Page 33.

Temperature display of temperature regulator flashes – temperature overshoot

Cause	Action
High ambient temperature.	➨ Move the unit to a cooler location. – or – Have a refrigeration technician change the refrigeration parameters of the temperature regulator.
The evaporator is covered with ice.	➨ Defrost the unit. ↳ Subsection "Defrosting the unit manually" on Page 14.
Refrigeration unit failed or damaged.	➨ Notify a facility authorized to carry out repairs. ↳ Chapter "Repairs" on Page 33.

Temperature display of temperature regulator flashes – temperature undershoot

Cause	Action
Refrigeration unit does not switch off when setpoint temperature is reached.	➨ Switch cooling off and on again with the On/Off switch. ➨ If the malfunction remains, notify a facility authorized to carry out repairs. ↳ Chapter "Repairs" on Page 33.

"E0" or "E1" flash in display of temperature regulator

Cause	Action
Break or short-circuit on cooling sensor or software error.	➨ Notify a facility authorized to carry out repairs. ↳ Chapter "Repairs" on Page 33.

"EP" flashes in display of temperature regulator

Cause	Action
Data loss is parameter memory	➨ Pull the power plug and reinsert it after a 10 seconds. ➨ Confirm alarm indication with "AB" button. ➨ If the display flashes, notify a facility authorized to carry out repairs. ↳ Chapter "Repairs" on Page 33.

Corrosion of stainless-steel parts

Cause	Action
Incorrect handling/care.	➨ Remove the areas of corrosion. ↳ Subsection "Removing areas of corrosion on stainless steel" on Page 30. ➨ Ensure proper handling/care.

The unit has external damage

Cause	Action
Damage during transport, change of location or other external influence.	➨ Shut the unit down. ↳ Chapter "Shutting down" on Page 22. ➨ Secure the unit from being started up accidentally. ➨ Notify a facility authorized to carry out repairs. ↳ Chapter "Repairs" on Page 33.

Cleaning and care

Stainless steel

Surfaces made of stainless steel must be kept clean, dry and open to the air at all times. When the unit is not in operation, keep unit door open to allow air circulation within.

Regularly remove lime, fat, starch and protein coatings by cleaning. Corrosion due to lack of air contact can occur under these coatings.

Do not allow concentrated acids, spices, salts etc. to come into extended periods of contact with parts made of stainless steel. Contact with these substances can cause corrosion. Acid fumes produced during tile cleaning can also lead to corrosion.

Do not damage the surface of stainless steel, especially with other metals. Residues of other metals may form chemical compounds which can cause corrosion.

Avoid contact with iron and steel at all times. Extreme corrosion can result when stainless steel comes into contact with iron (e.g. steel wool, wire scraps, iron-fortified water).

Cleaning frequency

The unit must be thoroughly cleaned after each use.

Cleaning methods

☞ Do not use a steam jet device or high-pressure cleaner.

The prescribed cleaning method for routine daily cleaning is to wipe the unit over with a damp cloth.

Stubborn soiling may be removed with a brush (synthetic or natural bristles).

Any other cleaning method must be approved by B.PRO.

Cleaning agents

☞ Do not use scouring agents or aggressive cleaning agents for the synthetic parts (door inner shell, bottom plate) (material damage!).

↳ Subsection "Cleaning agent for synthetic parts" on Page 7.

Cleaning agents for light soiling:

- Commercial cleaning agent/water solution
- Soft cleaning cloth
- B.PRO microfiber cleaning cloth (use with water only)

Cleaning agents for heavy soiling:

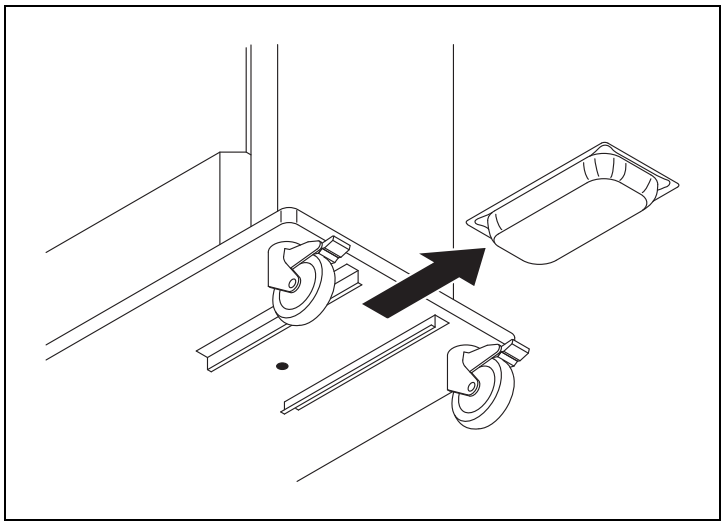
- Commercially available stainless steel cleaning agent, e.g. DeepClean Stainless Steel

☞ Synthetic parts (e.g. inner door shell, bottom plate) may not be cleaned with stainless steel cleaning agents, as the surface could be scratched.

Empty the condensation water catch tray daily and clean it every two weeks

☞ The condensation-water catch tray is located under the bottom panel and is removed and pushed in again from the door side.

- Pull the condensation-water catch tray from the guide.



- Empty the tray.
- If necessary, clean the unit using the cleaning methods and cleaning agents described above.
  - Subsection "Cleaning methods" on Page 26.
  - Subsection "Cleaning agents" on Page 26.
- Slide the condensation-water catch tray back in on the guide as far as possible after cleaning.

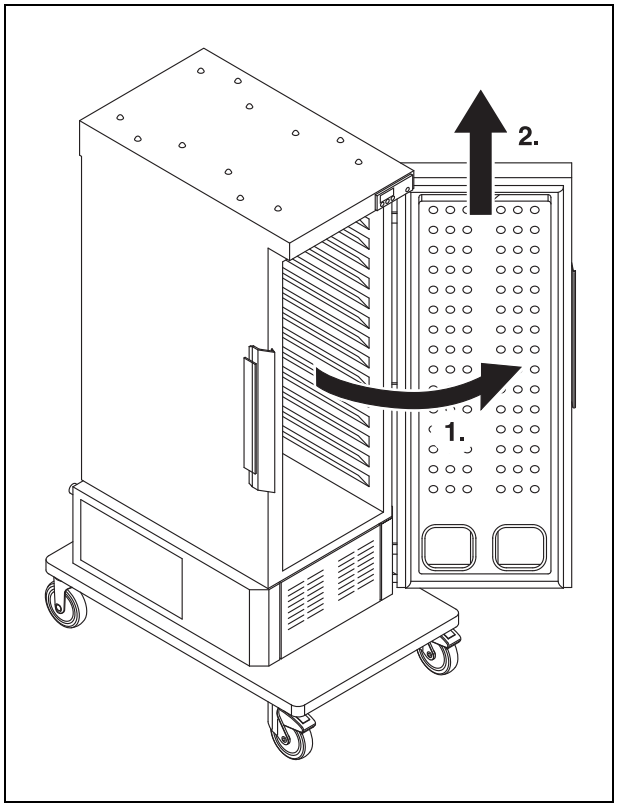
Cleaning the unit

- Unplug power plug from the electrical socket and insert it into the power plug retainer.
- Detach the unit door if necessary.
  - Subsection "Detaching the unit door" on Page 28.
- Clean the unit with the cleaning methods and cleaning agents described above.
- After cleaning with a stainless steel cleaning agent, rinse with water and rub dry.

Detaching the unit door

☞ The unit door can be detached to allow thorough cleaning.

- ➨ Open bent-clamp closure of the unit door.
- ➨ Open the unit door (1.) completely, push it upward (2.) and take it off the hinges.



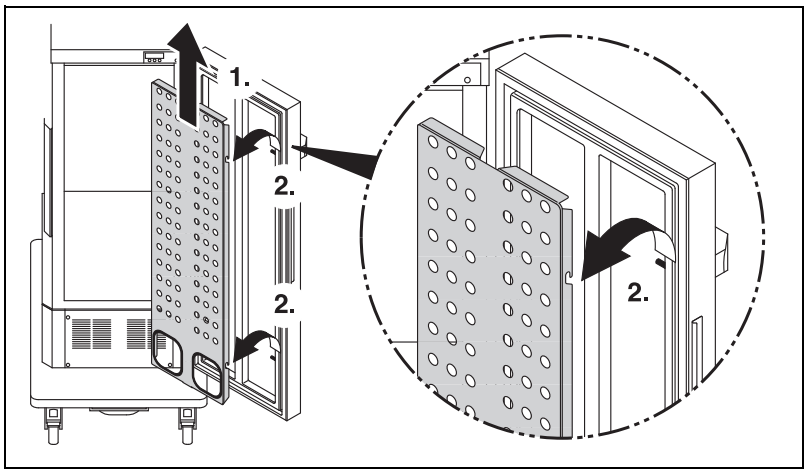
Unhooking air baffle

☞ The air baffle can be removed and cleaned in the dishwasher for thorough cleaning.

☞ The proper operation of the unit is only ensured when the air baffle is mounted on the inside of the door. Otherwise the cold air is not distributed evenly and sufficiently in the unit interior.

- ➨ Open bent-clamp closure of the unit door.
- ➨ Open the unit door wide.

➨ Lift the air baffle upward (1.) and then lift it out toward the front over the retaining pin in the door frame (2.).



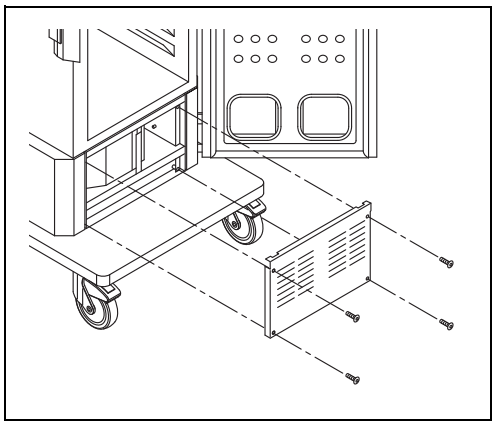
Cleaning convection revision panel

☞ For a thorough cleaning, the convection revision panel can be removed and cleaned in the dishwasher.

➨ Open bent-clamp closure of the unit door.

➨ Open the unit door wide.

➨ Unscrew the 4 screws on the convection revision panel and remove the convection revision panel.



➨ Clean convection revision panel.

➨ Position convection revision panel in place and secure with the four screws.

Removing areas of corrosion on stainless steel

New areas of corrosion

- Unplug power plug from the electrical socket and insert it into the power plug retainer.
- Remove areas of corrosion with a scouring agent or fine sandpaper.

Older and more severe areas of corrosion

i The cleaning measures described here for older and more severe areas of corrosion are recommendations of the German industry association for home, heating and kitchen technology (Industrieverband Haus-, Heiz- und Küchentechnik e. V. (HKI)).

☞ The cleaning measures for older and more severe areas of corrosion may only be carried out by trained personnel in compliance with the existing regulations.

⚠ Warning!

Caustic substances!
The acids used for removing areas of corrosion can cause injuries and also caustic damage to objects (e.g. clothing). Contact with the eyes can cause irreparable impairment of sight. In the worst case, total loss of sight could result.

- Wear protective clothing (protective eyewear, protective gloves etc.).
- Persons not involved in cleaning must be kept at a distance.

- Ensure that the power plug is unplugged.
- Remove areas of corrosion with 2 – 3% oxalic acid.
- Use 10% nitric acid if cleaning with oxalic acid is unsuccessful.

Maintenance

Having the unit regularly maintained

☞ B.PRO recommends regular maintenance of the unit by appropriately trained professionals. Regular maintenance prevents failure of the unit, extends its operating life and generally contributes to its retaining value.

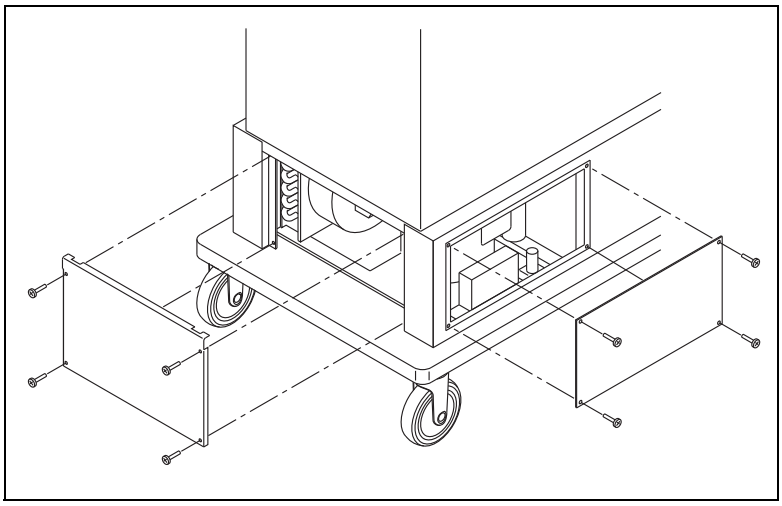
➨ Have maintenance performed on the unit regularly by appropriately trained professionals.

Maintaining the refrigeration unit

☞ B.PRO recommends having the refrigeration unit serviced once a year by a specialist company.

Checking refrigeration unit

➨ Unscrew the 4 screws each on the revision plate of the refrigeration unit on the back and on the left side wall of the unit and remove the revision plates.



➨ Check he refrigeration unit and clean if necessary.

➨ Position revision panel in place and secure with the screws.

Changing the refrigeration parameters

i The refrigeration parameters of the temperature regulator (such as switching hysteresis) can be modified or reset as required by a refrigeration engineer. Information on setting the temperature regulator will be found in the separate operating instructions for the temperature regulator. The instructions are located behind the revision plate on the back of the unit.

↳ Operating instructions for temperature regulator.

➨ If necessary, have the refrigeration parameters changed by a refrigeration engineer.

Checking the door seal

☞ The door seal must be checked regularly for damage.

➨ Check door seal for damage (visual inspection).

➨ If damage is present, contact one of the following:

- In-house, by B.PRO-trained technician
- Externally, by B.PRO-trained customer service engineer
- B.PRO Service

Checking seals on air baffle

☞ The seals of the intake and blow-out opening on the air baffle must be checked regularly for damage.

➨ Check seals for damage (visual inspection).

➨ If damage is present, contact one of the following:

- In-house, by B.PRO-trained technician
- Externally, by B.PRO-trained customer service engineer
- B.PRO Service

Performing maintenance on seals

➨ To extend the life of the unit seals, treat the seals regularly (monthly) with a commercial care agent.

Checking locking brakes

☞ The locking brakes must be checked for effectiveness every time the unit is moved to a new location.

➨ Lock the locking brakes.

➨ Try to move the unit while the brakes are locked (do not use excessive force!).

➨ 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 technician
- Externally, by B.PRO-trained customer service engineer
- B.PRO Service

Commission a periodical electrical safety inspection

➨ At least once every six months, have a periodical electrical safety inspection carried out by a professional electrician in accordance with the DIN VDE 0702 series of standards.

Checking the connection cable and power plug

➨ At least once every six months check the cable and power plug for mechanical damage and signs of excessive aging in accordance with BGV A 3 or the corresponding national regulations.

Repairs

Authorized persons

☞ Repairs may only be carried out by the following service points:

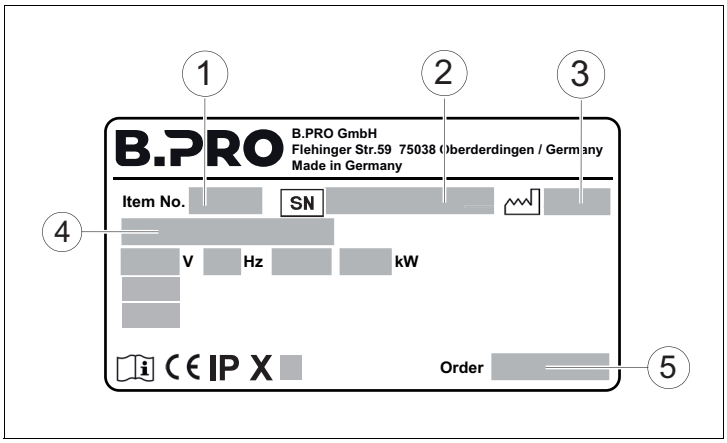
- In-house, by B.PRO-trained technician
- Externally, by B.PRO-trained customer service engineer
- B.PRO Service
- For repairs to the refrigeration system: Specialist refrigeration engineers

Description of problem

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

- Article number
- Serial number
- Date of manufacture
- Model
- Production order number (not present for standard model)

The rating plate is located near the power line to the unit.



(1) Article number
(2) Serial number
(3) Date of manufacture
(4) Model
(5) Production order number (not present on standard model)

Replacing components

☞ Defective components, including the power cable, may only be replaced through the following service points:

- In-house, by B.PRO-trained technician
- Externally, by B.PRO-trained customer service engineer
- B.PRO Service
- For repairs to the refrigeration system: Specialist refrigeration engineers

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)

Address

B.PRO GmbH
Flehinger Straße 59
75038 Oberderdingen
GERMANY
Phone +49 (0)7045 44 - 81416
Fax +49 (0)7045 44 - 81508
Email service@bpro-solutions.com
Internet www.bpro-solutions.com

Disposal

Disposing of unit

ℹ When disposing of old electrical or electronic appliances via regular council refuse, a potential danger for the environment and for health may occur due to specific contents of the appliances.
The unit should therefore never be disposed of via normal municipal waste disposal but must be separated and disposed of by the waste collection for electrical appliances (e.g. a specialised disposal plant).
To indicate this situation, the unit is marked with this symbol in accordance with DIN EN 50419, Marking of electrical and electronic devices dance with Article 15(2) of Directive 2012/19/EU (WEEE). If necessary, other special national regulations governing disposal must also be observed.

- Have the coolant disposed of by a specialist refrigeration company in accordance with the applicable statutory regulations.
- Ensure that the unit and door locks are no longer usable prior to disposal (e.g. by cutting off the mains plug).
- Turn the unit over to a recycling center or electrical refuse collection site.

☞ More detailed information regarding disposal and the addresses of disposal facilities will be available from the respective public office (e.g. city or community administration).

Technical data

i Depending on the model, a unit subject to these operating instructions may also have differing technical data (electrical and refrigeration-related specifications, dimensions and load). The mandatory information is provided on the rating plate or in the specific order documents and/or on drawings.

General data

Dimensions, weight and quantity of support ledges

Model	L x W x H (in mm)	Weight (in kg)	Number of support-ledge pairs
BPT 1020 EUK	540 x 845 x 1430	100	14
BPT 1220 EUK	540 x 845 x 1775	120	20

Loading capacity and load weight

Model	Capacity (GN containers) – example	Max. load weight in kg
BPT 1020 EUK	3 x 1/1-200 + 1 x 1/1-100	90
BPT 1220 EUK	5 x 1/1-200	130

Load capacity for top options

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

Option	Model	Castor model	Example of capacity (max.)	Max. load in kg
Additional bumper rail on top surface (synthetic panel)	BPT 1020 EUK BPT 1220 EUK	125/ 160	—	0
Smooth top surface with 4-sided, stainless steel railing	BPT 1020 EUK BPT 1220 EUK	125/ 160	BPT 320 KB (R)	33
Raised strips for stack stability	BPT 1020 EUK BPT 1220 EUK	125/ 160	BPT 320 KB (R)	33

Distance between support ledges

57,5 mm

Electrical data

Connected load

Voltage:	220 to 240 V, 50 Hz
Power (max.):	0.3 kW

Protection type

IP X4 (the unit is protected against splashed water in accordance with DIN EN 60529.)

Environment

Environmental conditions – operation

Temperature range:	+15 °C to +32 °C
Relative humidity:	without condensation

Environmental conditions – storage, transportation

Temperature range:	–10 °C to +40 °C
Relative humidity:	without condensation

Emissions

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

Material

CNS 18/10, polystyrene, polyethylene, high-molecular

Refrigeration system

Coolant:	R134a
Cooling range:	+2 to +15 °C, adjustable
Defrosting:	automatic, and manual where necessary
Sealing:	refrigeration system checked for proper sealing at factory
Cooling output:	0.37 kW at t_0 = –10 °C (evaporation temperature) t_a = +32 °C (ambient temperature)

Ordering information

BPT 1020 EUK:	Article numbers:	572 866, 572 868, 367 412
BPT 1220 EUK:	Article numbers:	572 867, 572 869, 367 413
Operating instructions	Document number:	154 358

Accessories

Gastronorm container	Article number:	↳ B.PRO price list
Slide-in frames	Article number:	564 352
Support crossbars	Article number:	↳ B.PRO price list
Eutectic plates	Article number:	↳ B.PRO price list
Menu cards for B.PROTHERM Stainless-Steel	Article number:	572 513
B.PRO microfiber cleaning cloth	Article number:	126 999
Stainless steel cleaning and care agent DeepClean Stainless Steel	Article number:	511 895

Standards, guidelines, inspection seal

DIN EN 12571: Tools and objects which come into contact with food – Transport means for prepared food in food containers – Thermal and hygienic requirements and test procedures.

DIN 18865-9: Large kitchen devices, production systems, cabinet interiors in standard and hygienic models.

DIN 18867-7: Equipment for commercial kitchens – Mobile equipment – Food transportation/distribution trolleys

EN 60335-1: Safety of household and similar electrical appliances; Part 1: General requirements.

DIN EN 60335-2-89: Safety of household and similar electrical appliances; Part 2-89: Special requirements for commercial cooling/freezing units with built-in or separate condensing unit or motor compressor.

DIN EN 60529: Protection types provided by enclosures (IP code).

DIN 66075-3: Food service appliances; insertable trays

DGUV regulation 110-003: Rules on safety and health protection for working in kitchens.

BGV A3 (VBG 4): Accident prevention regulations for electrical units and devices.

CE

CE Designation

The unit is in compliance with the following regulations:

- 2006/42/CE "Directive of the European Parliament and of the Council relating to machines"
- 2014/30/EU "Directive of the European Parliament and of the Council on the harmonisation of the laws of the Member States relating to electro-magnetic compatibility"
- 2014/35/EU "Directive of the European Parliament and of the Council on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits"
- 2011/65/EU "Directive of the European Parliament and of the Council for the alignment of legal provisions of the member states on the restriction of the use of certain hazardous substances in electrical and electronic equipment"
- 2014/68/EU "Directive of the European Parliament and of the Council for the alignment of legal provisions of the member states relating to the making available on the market of pressure equipment"

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