thermoport®– food transport containers

CE

The illustrations show configuration examples, which do not necessarily have to be included in the scope of delivery.

Observe the operating instructions
Translation of the Original Operating Instructions

DOWNLOAD: USER MANUAL
QR code on type plate

EN

Issue: 2021-04-14

Rieber
The mobile kitchen company.

Rieber Professional. Our solutions provide quality, safety and, in particular, a high level of energy efficiency and cost effectiveness.

CHECK HACCP – In the area of HACCP documentation the CHECK CLOUD platform offers the CHECK HACCP digital system, for simple, safe and transparent temperature detection.

In addition to this, further digital features are possible in the areas of hygiene and service management. The automated digital answer to the analogue paper trail.

Contents

1 Revision Index

Revision	Change
2011-05-06	First issue
2012-02-28	VDE mains cable, page 21; loading of mobile appliances; extract from EC Declaration of Conformity
2013-02-27	Addition to safety instructions
2013-04-04	Implementation of QM measures
2014-11-05	Weights and max. loading added, safety note modified, structure modified according to EN 60335-1
2017-07-05	Additions; adjustment to Rieber price guide
2017-09-21	Circulating air heater, adjustable; Designation
2017-12-11	Small improvements
2019-02-01	Temperature profile according to DIN EN 12571
2019-11-04_f1	TP 1000 K cool, (made of plastic)
2021-03-10	TP 1600k / 2000k / 3000k with R290 refrigerant
2021-04-14	Danger Note R290

2 Important Information

thermoport® is frequently abbreviated to **TP**

2.1 The components of the technical documentation

- thermoport® Operating Instructions
- Information on **CHECK HACCP**
  www.rieber.de
  Select "→ Service" at the top of the display list.
- Spare parts and necessary instructions.
  www.rieber.de
  Select "→ Customer Service" at the top of the display list.
- The Rieber price guide provides further information about a wide variety of accessories.
  www.rieber.de
  At the top of the display list, select: Search → price guide
  Or: Contact the manufacturer, Rieber, or your dealer
- Do you wish to have the operating instructions in another language?
  www.rieber.de
  Select "→ Customer Service" at the top of the display list.

2.2 Using this guide

This guide contains important information about how you can use the appliance safely and correctly.

- Read the operating instructions before first using the product.
- Keep this guide in a safe place and pass it onto the next owner should you wish to part with the product.

Our customers often express the wish to have one compact guide instead of a number of different guides for these product variants, which have similar functions.

If there are any shortcomings in your opinion, please do not hesitate to let us know. With your help, we will try to become even better.

Please add your notes here ☺

Note the details for your contact at Rieber Customer Service:

2.3 Representation conventions in the text

- Lists are represented in this way.

➢ Instructions on certain actions are represented in this way.

▌ The result of the action is represented in this way.

See '. . . ' cross-references are represented in this way.

ATTENTION

indicates potential damage to property without any personal injury.
Failure to follow these instructions may cause damage to property.

User tip

➢ Useful information or tip

2.4 Structure of safety instructions

The signal words DANGER - WARNING - CAUTION classify the possible degree of risk of bodily injury in an actual situation. You can avoid injury by complying with the behavioural rules provided.

The warning triangle symbol indicates a "General Danger".

DANGER

indicates **imminent danger**.
Failure to follow these warning instructions will result in **serious bodily injury or even death**.

WARNING

indicates a **potentially hazardous situation**.
Failure to follow these warning instructions **may** cause **serious bodily injury or even death**.

CAUTION

indicates a **potentially harmful situation**.
Failure to follow these warnings **may** cause **minor bodily injury**.

2.5 Tips on selecting the TP for your specific requirements

The plastic **thermoport**® are sturdy enough to meet a wide variety of transport requirements.

The stainless steel **thermoport**® is ideal for festive occasions.

 # Here are the advantages at a glance

- Excellent insulation values
- Gastronorm-compliant
- Hygienic. Smooth surfaces without hidden angles
- Exchangeable floor protection rails
- Doors easy to remove
- The plastic and stainless steel version of the **Rieber thermoport**® can be combined together for stacking and stored on Rieber transport and serving trolleys — for non-slip and safe transport.
- **CHECK HACCP** – the digital system for simple, safe and transparent temperature detection – also retrofittable. In addition to this, further digital features are possible in the areas of hygiene and service management.

See 'CHECK HACCP', page 48

 # Abbreviations used

thermoport® is frequently abbreviated to **TP**

Brief guide to the type code:

TP			—		thermoport®
TP	4.0				… symbolises new generation such as Industry 4.0
TP		6000 3000 2000 1600 1400 1000 105 50	—		… the number indicates the size in the order
TP			U		… with circulating air heater /stainless steel TP
TP			DU		… with circulating air heater and lid on top /stainless steel TP
TP			L		… top loader /stainless steel TP
TP			K		… (K) plastic
TP			KB		… (K) plastic / (B) heatable
TP			KB	-A	… (K) plastic / (B) heatable; Temperature controller without display
TP			KB	-D	… (K) plastic / (B) heatable; Temperature controller with digital display
TP			K		… (K) plastic /plastic TP
TP			K	cool	… (K) TP made of plastic (cool) with refrigeration unit /circulation fan

3 Safety Instructions

This section covers residual risks and hazards associated with the intended use of the appliance. We have provided a list of all generally valid safety instructions which must be followed.
In the following section, safety information relating to a particular operation or situation is placed before the appropriate operation step or description of the situation.

3.1 General behaviour

This appliance meets the current state of the art and complies with all acknowledged technical safety-related regulations. Nevertheless hazards may still arise.

- Do not use the device as a stepladder or to store objects on.
- Only use this appliance when it is in fault-free condition and according to the instructions in this user guide.
- During all phases of the appliance's life please ensure that the appliance is safely integrated into its environment.
- Refrain from rearranging or changing the device.

3.2 On use of electrical appliances

Safety instructions according to EN 60745-1:

Work area

- Keep your work area clean and tidy. A messy or unlit work area can cause accidents.
- Keep children and other people away from the area when work is being carried out.

Electrical safety

- The plug on the unit must fit in the socket. Do not modify the plug in any way. Never use an adapter in combination with earthed appliances. Using an unmodified plug and a suitable socket will reduce the risk of an electric shock.
- Avoid bodily contact with earthed surfaces such as pipes, heating units, cookers and refrigerators. The risk of an electric shock is greater when your body is earthed.
- Keep the device away from rain or wet. Allowing water to get into an electric appliance will increase the risk of electric shock.
- When removing food, make sure that no liquids, e.g. sauce come into contact with the thermoport®. This will increase the risk of an electric shock.
- Do not use the cable for anything other than the intended purpose to disconnect the plug from the socket. Always remove whilst holding onto the plug. Keep the cable away from heat, oil, sharp edges or the moving parts of other appliances. Using damaged or tangled cables increases the risk of electric shock.
- When working with an electrical appliance outdoors, only use extension cables which are permitted for outdoor use. Using an extension cable suitable for outdoor use reduces the risk of electric shock.
- Potential risk of fire due to heat build-up. Unwind the cable from the cable drum to prevent a possible heat build-up and/or cable fire. The coupling must have splash protection, must be made of rubber or be rubber-coated.

Safety guidelines for persons

- Be attentive and pay attention to what you are doing, act rationally when working with an electrical appliance. Do not use the appliance when tired or under the influence of drugs, alcohol or medication. Just one moment of inattention whilst using the appliance can result in serious injury.
- Make sure the appliance cannot be switched on unintentionally. Double check that the main switch is in the "OFF" position before inserting the plug in the socket. Connecting the appliance to the power supply while it is switched on can cause an accident.

Careful handling and use of electrical appliances

- Keep unused electrical devices away from children. Do not allow the appliance to be used by persons who are not familiar with it or persons who are not familiar with this user guide. Electrical appliances are dangerous when in the hands of inexperienced persons.
- Treat the device with care. Check that moving parts are functioning properly and do not block; check whether parts are broken or damaged and impairing the functioning of the device. Have any damaged parts repaired before using the appliance. Many accidents are caused by poorly-maintained electrical appliances.
- Use electrical appliances, accessories etc in accordance with these instructions and in a manner that is specified for this particular appliance type. When using the appliance, please take into account the working conditions and the work being carried out. Using electrical appliances for other uses than that intended can lead to hazardous situations.

Service

- Only have the device repaired by qualified and authorised staff. Only use original spare parts. In this way you can ensure that the appliance remains safe.

3.3 Operator's duties

Operator

The operator is the person who operates the appliance for commercial or economic purposes either himself/herself or lets others use it and bears the legal appliance responsibility for protection of the user, staff or any third parties during operation.

Operator's duties

The appliance is used in commercial applications. For this reason, the operator of the appliance must meet all legal duties relating to work safety.

In addition to the safety instructions in this guide, the safety, accident prevention and environmental protection regulation applying to the application of the appliance must be complied with.

In particular, the following shall apply:

- The operator must be familiar with the applicable work safety regulations and identify, by carrying out a risk analysis, any additional hazards which are due to the place where the appliance is used. These hazards must be addressed in the form of operating instructions governing the operation of the appliance.
- Throughout the period of use of the device the operator must check that the operating instructions which he has compiled comply with the current regulations and adapt them if necessary.
- The operator must clearly regulate and define the responsibilities for installation, operation, troubleshooting, maintenance and cleaning.
- The operator must ensure that all employees who use the device have read and understood these instructions. In addition, the operator must train the personnel and inform them of the hazards involved at regular intervals.
- The operator must provide the personnel with the necessary protective equipment and issue mandatory instructions on wearing it.

In addition, the operator must ensure that the appliance is always in a perfect technical condition. For this reason, the following shall apply:

- The operator must ensure that the maintenance intervals defined in this guide are obeyed.
- The operator must regularly check all safety devices for functionality and completeness.
- The operator must ensure that the appropriate media connections are present.
- The operator must ensure that structural safety measures are performed.

3.4 Personnel qualification requirements

Safe operation requires certain technical skills and personal qualification of each person.

- The responsibility for organization lies with the '**Designated Representative**' (operator). According to EN 50110-1 a work supervisor is a person who is appointed to take direct responsibility for the performance of work. If necessary, this responsibility can be assigned partly to other persons. [...] The designated representative must instruct all persons involved in the work on all hazards which may not be obvious for them'.
- The work may only be performed by '**instructed persons'** who have been trained accordingly. Training, instructions must be repeated, proper understanding must be verified (ideally by way of an appropriate test).
- Only '**Qualified Staff**' are allowed to carry out repair work.
  IEC 60204-1 defines qualified personnel as "persons who, on account of their training and relevant experience are in the position to recognise risks and avoid potentially dangerous situations."
- Electrical work may only be carried out by trained and experienced **electricians**.
  Electro-technically instructed persons may only work under the supervision of a qualified electrician.
- Work on the cooling unit should only be carried out by authorised skilled personnel like a **refrigeration specialist** or a member of the Rieber Customer Service.
- The heating unit housing may only be opened/closed for the purpose of thorough cleaning by appropriately trained and authorised operating personnel.
- Any repairs and/or overhaul during the warranty period may only be carried out by the manufacturer´s service department.

'Warranty and liability', page 75

3.5 Personal protective equipment (PSA) must be readily available for personnel

The requirements for safety shoes are regulated by standards. The safety shoes in this case are intended to protect the toes. S1 safety shoes are protective shoes with the requirement that a protective toecap is present. As with S2 and S3 safety shoes, the protective toecap has a load capacity of 200 joules. These requirements are regulated in EN 20345:2004 for safety shoes.

- ➢ Ensure that the personnel wear the personal protective equipment appropriate to the relevant situation.
- ➢ Wear sturdy shoes to prevent injuries.
- ➢ Wear protective gloves to prevent burns to hands and arms due to contact with the heating unit, which can have a temperature of up to 100 °C.

3.6 Appliance-specific safety instructions

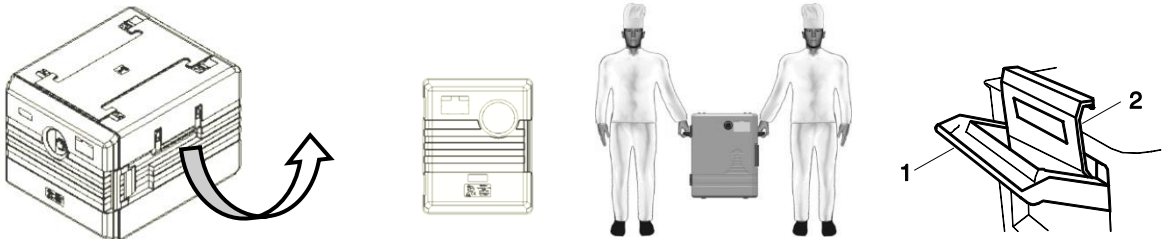
This chapter describes general, appliance-specific safety instructions. In the following section, additional safety information relating to a particular operation or situation is placed before the appropriate operation step or description of the situation.

3.6.1 Risks in transit

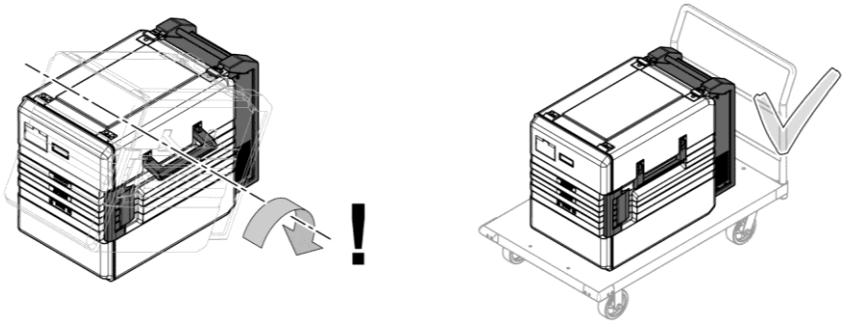
 # Portable thermoport®

- There is a risk of injury when lifting and carrying heavy loads. Such work may only be carried out by suitable and appropriately trained personnel. If you are not physically fit, consult your designated representative.

Chapter 'Information on accessories ', page 45 ff., section "MOBILE APPLIANCES" …little helpers



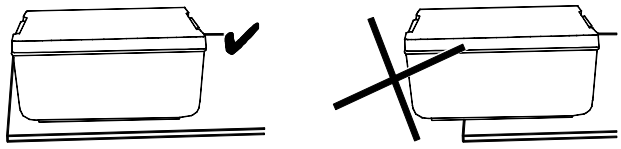
- When transporting the appliance hold it at the handle (1), not the clip lock (2). Hold it at the fold-out carrying handles.



TP 1000 K cool

- The appliance tilts back when lifted. Use a transport trolley.

Example



- Deposit the TP safely.
- Ensure stable positioning of the TP: Place the appliance far enough back from the installation edge so that when it is emptied the door can rest on the installation surface.
- Only stack matching TP appliances, otherwise there is a risk of tipping and falling. Judge the permissible stack height realistically on your own responsibility. We recommend: Stack 2 stackable TP appliances on top of each other.
- Keep the door/lid closed during transport.

 # Mobile thermoport®

- Do not pull the appliance, always push it using the pushing handle.
  This will also give you a better overview and allow direct access to the ‘castors with parking brake’. Do not lift the appliance using the pushing handle, as this could cause damage.
- Keep the door/lid closed during transport.
- Only transport the appliance on a level surface if possible.
- Move the appliance with 2 people if necessary.
- Use the two parking brakes to prevent the device from rolling away accidentally. Only park the device on flat surfaces.
- Wear safety shoes to prevent injuries.
- Mobile appliances may only be moved manually. Machine-aided transport, e.g. using fork lift trucks or lift trucks, is not permissible.

ATTENTION

Uneven ground such as edges, ridges or thresholds can damage the castors.

- Only move the appliance over flat, smooth surfaces. Do not push or pull the appliance over sharp edges.
- Note the permissible step height, maximum 4 mm, otherwise the castors may be damaged.
- Do not use this appliance on poor floor conditions.
  We are not able to rule out the possibility of marks appearing on the floor due to friction with castors or the formation of scratches due to split cracks in the castors, for example.

 # Load safety

According to § 22 of the Road Traffic Regulations (StVO) the load must be stowed and secured in such a way that it cannot slip, fall over, roll, fall off or cause avoidable noise even during emergency braking or if a sudden evasive motion is required. The responsibility for the load safety lies with the driver, the owner and the shipper.

- Secure the load.

See transport safety in chapter ‘Information on accessories ’, page 45

3.6.2 Risks due to electricity

- ⚠ **Danger of electric shock. Risk of death**.
  Keep the device away from rain or wet.

Risks when handling open liquids and food. Liquid could penetrate the circulating air heater or refrigeration unit.

- Only transport liquids and food in closed condition.
  We recommend: Use Gastronorm containers and thermoplates® with watertight press-in lids from Rieber.
- Transport the filled TP with electrical connection in the position of use.
- Before cleaning always disconnect the appliance from the power, then dismount the removable electric heating unit or removable refrigeration unit. Wipe electrical parts **with a slightly damp cloth** and use a dry **cloth to rub dry**.
- Always disconnect the power cable before transporting the appliance; use the mains plug to do this.
- Install the electric cable in such a way that risks like falling over or tearing off the cable, etc. are avoided.

Risks due to soiled heater.

- Do not poke anything into the ventilation grille.
- The heating unit housing may only be opened/closed for the purpose of thorough cleaning by appropriately trained and authorised operating personnel. If necessary, contact the manufacturer's service department.

See 'Personnel qualification requirements', page 10

Risks due to moisture and ambient temperature below +2 °C.

- Do not set or store below +2 °C, otherwise stray electrical currents may result due to condensation water. Only use in dry areas and ambient conditions. Leakage currents can be dangerous.

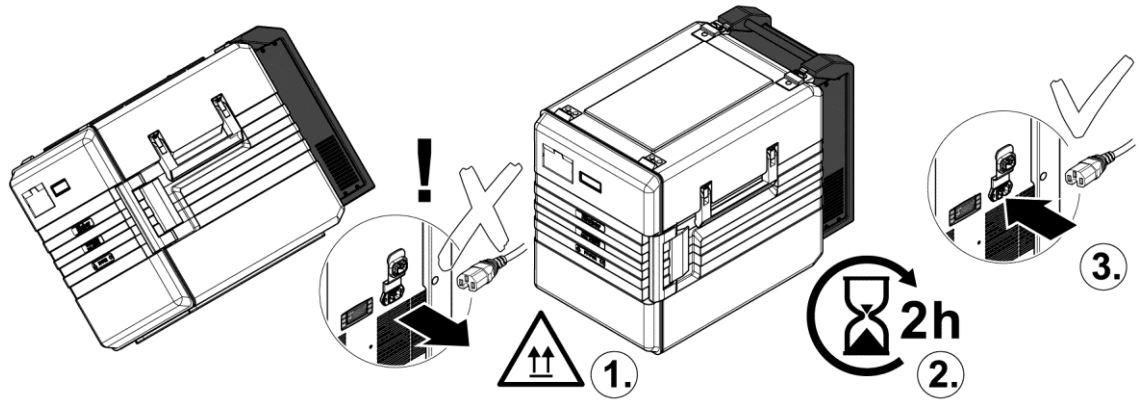
Risks in wet areas. The operator is obliged to comply with the legal requirements, for example sockets must be arranged at a height of at least 1 m and have a pre-switched residual current operated device (RCD) with a tripping current of 30 mA.

- Do not use extension cables in wet areas.

3.6.3 Risks of incorrect handling

If the vent on the back of the appliance is obstructed, the appliance can be badly damaged; malfunctions are also possible.

- Do not insert any objects into the ventilation slots of the protective grilles.
  Do not cover the ventilation slots.



Example of TP actively cooled, (made of plastic)

NOTE

If the refrigeration unit has been tilted, the cooling circuit could be impaired. After a cooling circuit malfunction the refrigerant must accumulate first of all.

- In case of doubt allow the appliance to stand undisturbed for at least two hours, in a vertical position and electrically switched off. Do not turn on electrically until then.
- Only use the appliance in its working position, vertically upright.

- Check the cooling function.

3.6.4 Risk of burning and scalding

- Risk of burns from contact with up to 100 °C electric heating. Allow the heating to cool down beforehand, for around 20 minutes. Wear protective gloves.
- Risk of scalds from contact with hot liquid food. Store food in containers and seal with a lid.
- Keep any combustible or explosive fluids away from heatable appliances. Otherwise a fire or explosion may occur.

3.6.5 Risk of suffocation

- Danger of suffocation if persons get locked in the appliance. Make sure persons with limited sensory and mental ability have no access to the appliance.

3.6.6 Warnings concerning the use of the appliance by children

- This appliance may be used by children over 12 and by persons with limited physical, sensory and intellectual abilities or a lack of experience and/or knowledge if they are supervised or if they have been instructed in the safe use of the appliance and have understood the resulting dangers.
- When using the appliance with ‘accessories’, other risks may arise.
- Children may not play with the appliance.
- Cleaning and user maintenance may not be carried out by children without supervision.

3.6.7 Safety and monitoring devices

- In the event of a fault in the control or electrical system the appliance switches itself off, alternatively the maximum permissible temperature is not exceeded.
- The circulating air heaters with bayonet fitting are unmistakable thanks to the arrangement of the keyholes.
- Hot steam can escape even when the steam valve in the door of the heatable stainless steel TP is closed. Allow more steam to escape before opening the door if necessary, by opening or turning the steam valve.
- The plastic cover fits positively, small gap width. Steam can escape, pressure equalisation is ensured.
- To increase your safety we recommend that you install an earth leakage circuit breaker with a tripping current of 30 mA upstream of the appliance.
- Push handle on mobile TP: Do not pull the appliance, always push it using the pushing handle. This will also give you a better overview and allow direct access to the ‘castors with parking brake’.
- The connection cable is heat-resistant up to 120 °C and cannot be confused due to the shape of the connector.
- The plastic and stainless steel versions of the **Rieber thermoport**® can be combined together for stacking and stored on Rieber transport and serving trolleys — for non-slip and safe transport.

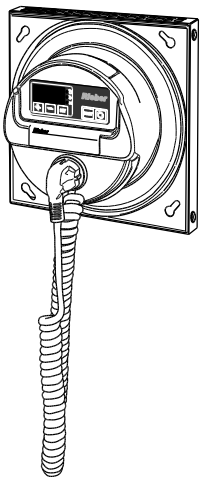
Chapter ‘Information on accessories ’, page 45 ff., section "MOBILE APPLIANCES" …little helpers“

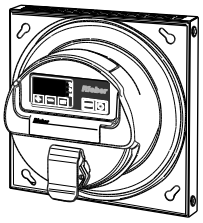
3.6.8 Note the product identification and ensure its preservation

The type plate on the appliance bears the legally required product data.

NOTE: If the product identification is damaged or illegible, the warranty will be invalidated. Contact Rieber Service as early as possible in the event of damage.

Heating unit with bayonet fitting



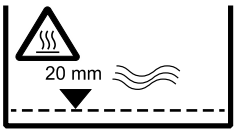


The following is indicated on the back:
→ Danger of electric shock. Risk of death.
→ Hot surface
→ Keep away from moisture
→ Observe the operating instructions

Heating unit with click fitting

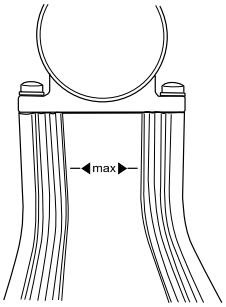
The following is indicated on the back:
→ Danger of electric shock. Risk of death.
→ Hot surface
→ Keep away from moisture
→ Observe the operating instructions

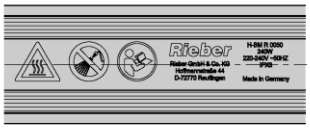
Bain-marie



The following is indicated on the top of the container:
→ Hot surface
→ For ‘wet heating’ pour 2 cm of water into the bain-marie

Bain-Marie

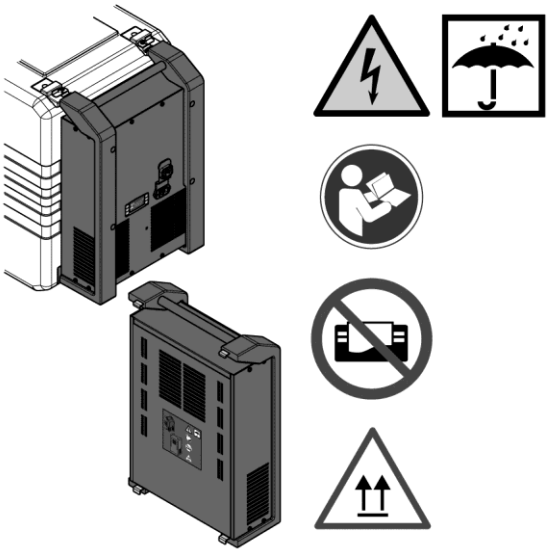




The following is indicated on the heater element:
→ Maximum water level
→ Hot surface
→ Protection class IPX3. Protection against falling spray water up to 60 ° from vertical
→ Observe the operating instructions

H-BM R 0050 → Applies to: TP 50 KB heatable
H-BM R 0100 → Applies to: TP100 KB heatable

TP actively cooled, (made of plastic)



The following is indicated on the back:
→ Danger of electric shock. Risk of death. Protect the refrigeration unit against moisture.
→ Observe the operating instructions
→ Do not cover ventilation slots.
→ Only use the refrigeration appliance vertically upright.

3.7 Information about regulations to be followed

In addition to this user guide there are a range of health and safety and other regulations that are relevant for the operation of this cooking station; these include HACCP food hygiene regulations for example.

Maximum keep-warm time according to HACCP is 2 hours.

3.8 Instructions on behaviour in an emergency

- In an emergency always interrupt the power connection immediately, by disconnecting the electrical connector.

⚠ First aid in the case of burns, scalds, crushing or electric shock:

- Inform yourself on this before commissioning the appliance.
- Store the emergency equipment, including the relevant instructions, at a readily accessible place near the place of use. Make yourself familiar with the instructions.

User tip

- You can find detailed information in the company's internal instructions.
- We recommend that half-yearly emergency training sessions should be carried out.

4 Purpose

This chapter provides information on the intended use of the product and warns against foreseeable misuse or abuse, for your safety. Use the appliance for its intended use.

⚠ Intended use in principle means:

- For service in catering, hotels and restaurants; also suitable for the care and school catering sectors. For food delivery / food distribution. Not intended for private use at home.
- Only transport food and liquids closed. Protect thermoport® electrical appliances against moisture, otherwise liquid could penetrate the circulating air heater or the refrigeration unit, for example. We recommend: Use containers with watertight press-in lids such as thermoplates ® and Gastronorm containers from Rieber.
- Transport TP in its working position.
- Only transport food and liquids closed. We recommend: Use containers with watertight press-in lids such as thermoplates® and Gastronorm containers from Rieber.
- The loaded TP may only be carried / lifted by suitable and trained personnel.
- Only transport the appliance in its correct position (operating position).
  We recommend: Stack no more than 2 stackable TP appliances on top of each other.
  When stacking, ensure that the guide rails of both devices slot into one another.
- To prevent injuries such as burns on hot surfaces, use of the product by the public or for self-service should only be allowed under supervision. Wear personal protective equipment to prevent burns and scalds.
- To avoid the risk of scalds, transport the appliance horizontally. Observe the permissible water level according to the product identification. Open the lid carefully.
- Remove the heating unit before cleaning the heatable appliance. Allowing water to get into an electric appliance will increase the risk of electric shock.
- Regulate the temperature of the TP in the heating cabinet or cold store if necessary, in the range of +2 °C to +85 °C.
- The intended use includes compliance with the technical data.
- The person responsible for the work, e.g. the chef, defines how the TP is actually used and is responsible for such use.
- For use only by appropriately trained and suitable operating personnel.

 # thermoport®

- The TP is intended for the thermally-insulated transportation of heated or chilled foods. Transport of prepared meals. Transport TP with closed door/lid and mains plug disconnected.

 # thermoport® with circulating air heater

The radiant heat ventilation produces an intensive uniform air flow.

- For thermally-insulated heating of food. More uniform temperature distribution by adjustable electric heating and circulating air controller.

 # thermoport® with heating function /static radiant heat

The radiant heat on the heating surface produces an air current. Examples: TP 100 KB-CNS with surface heating in the floor and side area of the carcass and TP 100 KB with rod heating.

- For thermally-insulated heating of food.

 # thermoport® for keeping food cold

Keep cold via cooling pellets or TP actively cooled.

- For keeping chilled meals and beverages cold. Keeping cold at +2 °C to +8 °C.
  Keeping pre-chilled food at storage temperature.
- Do not place the appliance close to heat sources.
- Move and chill the food correctly daily after use, switch off and clean the appliance.
- Only use the refrigeration unit of the TP 1000 K cool in the vertically upright position.

⚠ Prevent any predictable misuse and abuse:

- Protect thermoport® electrical appliances against moisture, otherwise liquid could penetrate the circulating air heater or the refrigeration unit, for example. Therefore only transport food and liquids closed.
- Only stack matching TP appliances, otherwise there is a risk of tipping and falling. Judge the permissible stack height realistically on your own responsibility.
- Ensure stable positioning of the TP.
  Example for size 1000: For one appliance, place this far enough back from the installation edge so that when it is emptied the door can rest on the installation surface.
- Transport TP with closed door/lid and mains plug disconnected.
- Always use the mains plug when disconnecting the connection cable. Do not pull the cable.
- Do not use the TP as a storage surface for hot transport containers.
- Do not throw the TP, but handle it with care.
- Do not use the TP as a stepladder.
- Do not place the TP on a hot cooker or on angled surfaces.
- Do not place the TP inside the oven or heat it up.
- Do not use the TP to heat or cool rooms.
- Do not cover the heater with cloths or similar items.
- Secure the thermoport® in position during transport.

See transport safety in chapter 'Information on accessories ', page 45

- Keep water spray, particularly steam jet cleaners, away from electrical parts of the TP as well as the heater and cooling device.
- Keep any combustible or explosive fluids away from heatable appliances. Otherwise a fire or explosion may occur. Do not keep meals with a high proportion of strong alcoholic beverages hot.
- Do not use stainless steel appliances in aggressive ambient conditions, for example extremely salt-laden air such as close to the sea or at a swimming pool with a chlorinated atmosphere, as this could damage the stainless steel.
- Do not pull or push the appliance over sharp edges, danger of material damage.
- Do not use this appliance on poor floor conditions.
  We are not able to rule out the possibility of marks appearing on the floor due to friction with castors or the formation of scratches due to split cracks in the castors, for example.
  We are not able to rule out the possibility that the castors may be damaged or become unusable due to swelling or sharp edges on the floor.
- Mobile appliances may only be moved manually. Machine-aided transport, using fork lift trucks or lift trucks, is not permitted.
- Do not use the heating unit of the heatable TP for other purposes, for example to heat other containers or as an exposed space heater.

5 Description of device

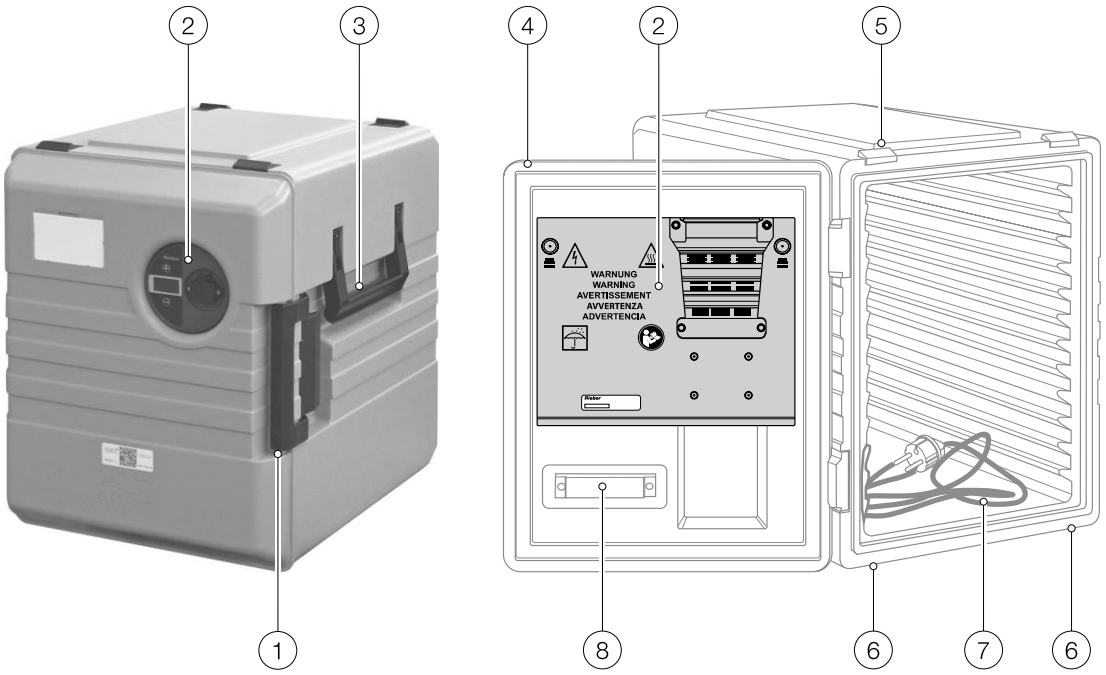
This chapter has interesting facts about the set-up and functionality of this appliance

5.1 Designation

Identification of components

All parts are named here to facilitate further understanding of the manual.

Example



Heatable TP 1000 KB with digital circulating air heater

1 Door lock
2 Circulating air heater
3 Handle for lifting the appliance, on both sides
4 Door
5 Stacking corners
6 Stacking runner
7 Mains cable, internal
8 CHECK sensor (option)

5.2 Technical data

5.2.1 General data

5.2.1.1 Electric connector

Rated voltage / mains frequency	1N AC 230V 50/60Hz
Electrical connection	Approx. 2 m cable length; Type H05RN-F 3x1.0 mm^2

5.2.1.2 Protection class

 # Protection class for heatable TP

Protection class for TP in working condition with mains plug inserted	IPX4 according to DIN EN 60529 → Protection against water splashes on all sides
Protection class for heating unit in disassembled condition	IPX3 as per DIN EN 60529 → Protection against falling spray water up to 60 ° from vertical

 # Protection class for stainless steel TP for keeping cold with active circulating air cooling

Protection class for TP in working condition with mains plug inserted	IPX4 according to DIN EN 60529 → Protection against water splashes on all sides
Protection class for circulation fan in disassembled condition	IPX3 as per DIN EN 60529 → Protection against falling spray water up to 60 ° from vertical

 # Protection class for plastic TP for keeping cold with active circulating air cooling

Protection class for TP in working condition with mains plug inserted	IPX0 according to DIN EN 60529 → Protection against dripping water
Protection class for circulation fan in disassembled condition	IPX0 according to DIN EN 60529 → Protection against dripping water

5.2.1.3 Housing

Housing / door / lid	**Made of chromium-nickel steel**: Carcass with double-wall insulation, interior seal-welded. Door / lid have an elastic seal. The seal is removable. Temperature-resistant from -20 °C to +85 °C. **Made of plastic:** Non-porous plastic skin, seal-welded. The plastic cover fits positively, small gap width. Temperature-resistant from -20 °C to +85 °C.
Mobile appliance	4 corner guards. Plastic rollers, wheel diameter 125 mm. 2 steering and 2 swivel castors. Stainless steel castors and antistatic tyres on request.

5.2.1.4 Data for heatable TP and actively cooled TP

 # Heatable TP [1]

Circulating air heater for stainless steel TP. … with bayonet fitting Order no.: 55 05 02 56	Heating temperature can be regulated between +20 °C and +100 °C. TPs with circulating air heating produce a more even heat distribution. → Applies to: TP 3000 U, TP 2000 U, TP 3000 hybrid, TP 1600 DU, TP 1600 U, TP 1400 U, TP 1000 DU, TP 1000 H *Page 53*
Circulating air heater for plastic TP. … with bayonet fitting Option can be ordered separately as a spare part, Order no.: 55 05 02 55	Heating temperature can be regulated between +20 °C and +85 °C. TPs with circulating air heating produce a more even heat distribution. → Applies to: TP 4.0 1000 KB circulating air *Page 53*
Circulating air heater for plastic TP. … with click fitting Order no.: 55 05 02 60	Heating temperature up to +85 °C. There are no setting options. TPs with circulating air heating produce a more even heat distribution. → Applies to: TP 6000 KB, TP 1000 KB-A, TP 600 KB-A *Page 55*
Circulating air heater for plastic TP. … with click fitting Option can be ordered separately as a spare part, Order no.: 55 05 02 61	Heating temperature can be regulated between +20 and +85 °C. TPs with circulating air heating produce a more even heat distribution. → Applies to: TP 6000 KB-D, TP 1000 KB-D, TP 600 KB-D *Page 55*
Surface heating in floor and around 2/3 height at sides	Heating temperature up to +85 °C. There are no setting options. TP with surface heating. → Applies to: TP 105 L, TP 100 KB-CNS Can be used as bain-marie together with GN-containers.
Rod heating Order no.: 55 05 02 14	Heating temperature up to +85 °C. There are no setting options. TP with rod heating → Applies to: TP 100 KB, TP 50 KB Can be used as bain-marie together with GN-containers.

 # TP actively cooled

Keeping cold	+2 °C to +8 °C with the door closed.
Refrigerant	R134a
NOTE:	Stainless steel TP for keeping cold with active circulating air cooling. → Applies to: TP actively cooled, mobile, made of stainless steel
	Plastic TP for keeping cold with active circulating air cooling → Applies to: TP 1000 K cool, (made of plastic)

In principle all TPs can be passively cooled with cooling pellets.

Keeping cold means: Keeping pre-chilled food at storage temperature.

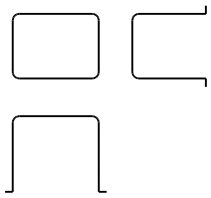
'Advance heating/cooling of the thermoport®', page 52

[1] Abbreviations used: See chapter 2.5

5.2.1.5 Hygiene version

- TP 1600 DU in hygiene version H2
- All other thermoport® in hygiene version H3
  (DIN 18865-9:1997 Food Distribution Equipment, Part 9 is complied with.)

Hygiene version **H 3** means: Floor, walls and cover welded tightly and gap-free.
All curvatures ≥ 10 mm.

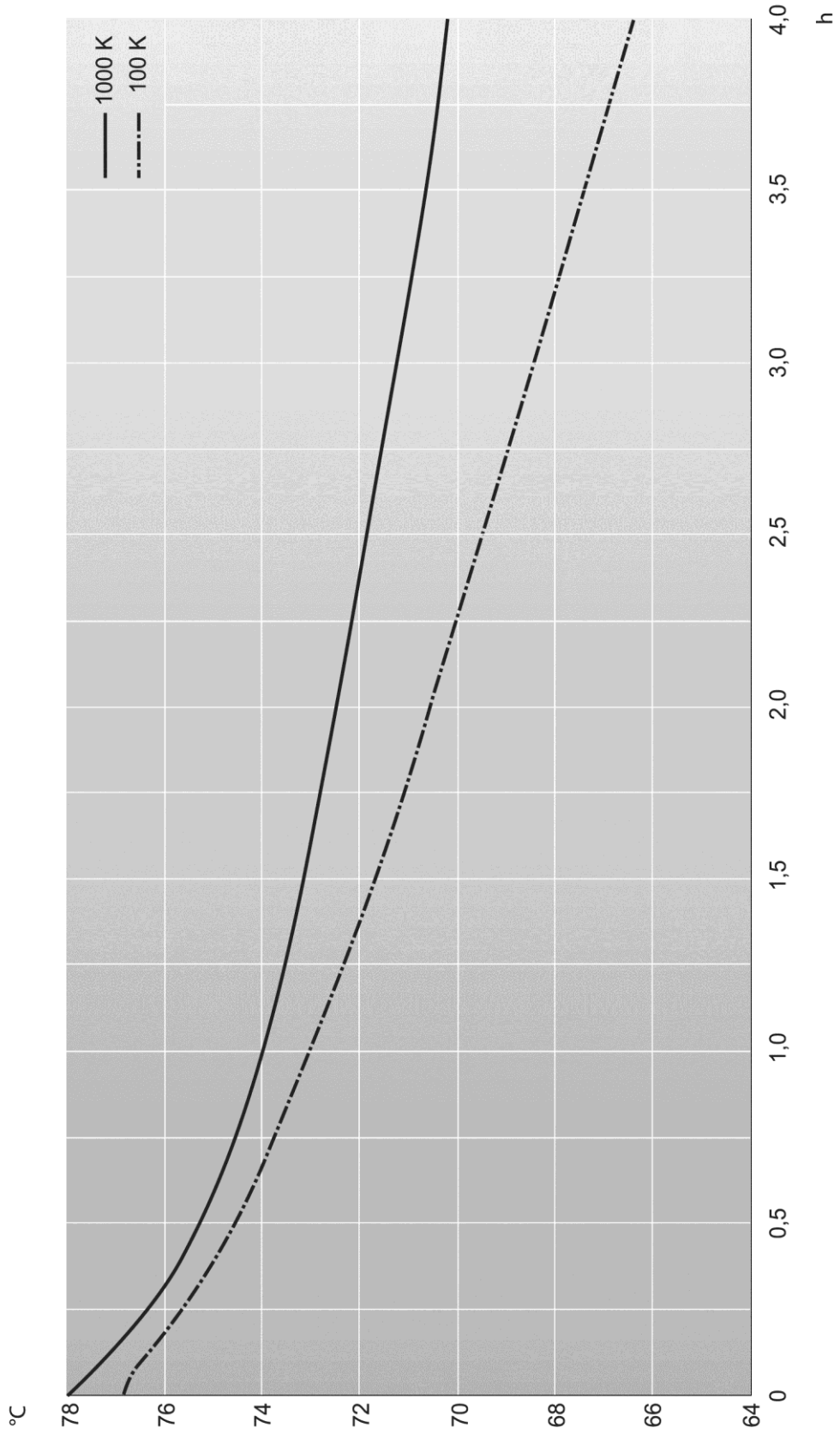


5.2.1.6 Insulating behaviour of thermoport®

Measurement according to DIN EN 12571

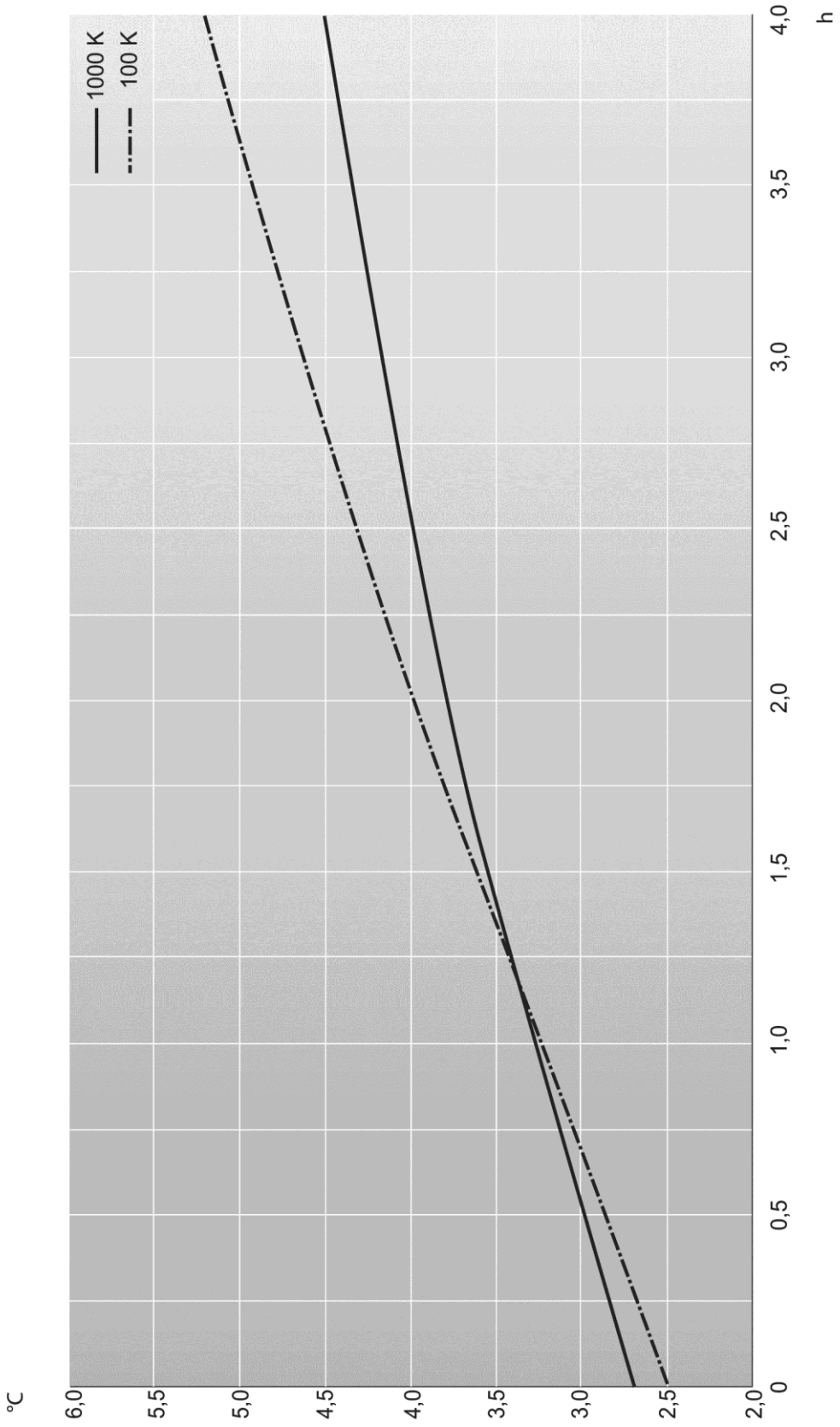
→ See diagrams on the following pages.

 # Temperature profile for keeping food warm (hot operating condition)

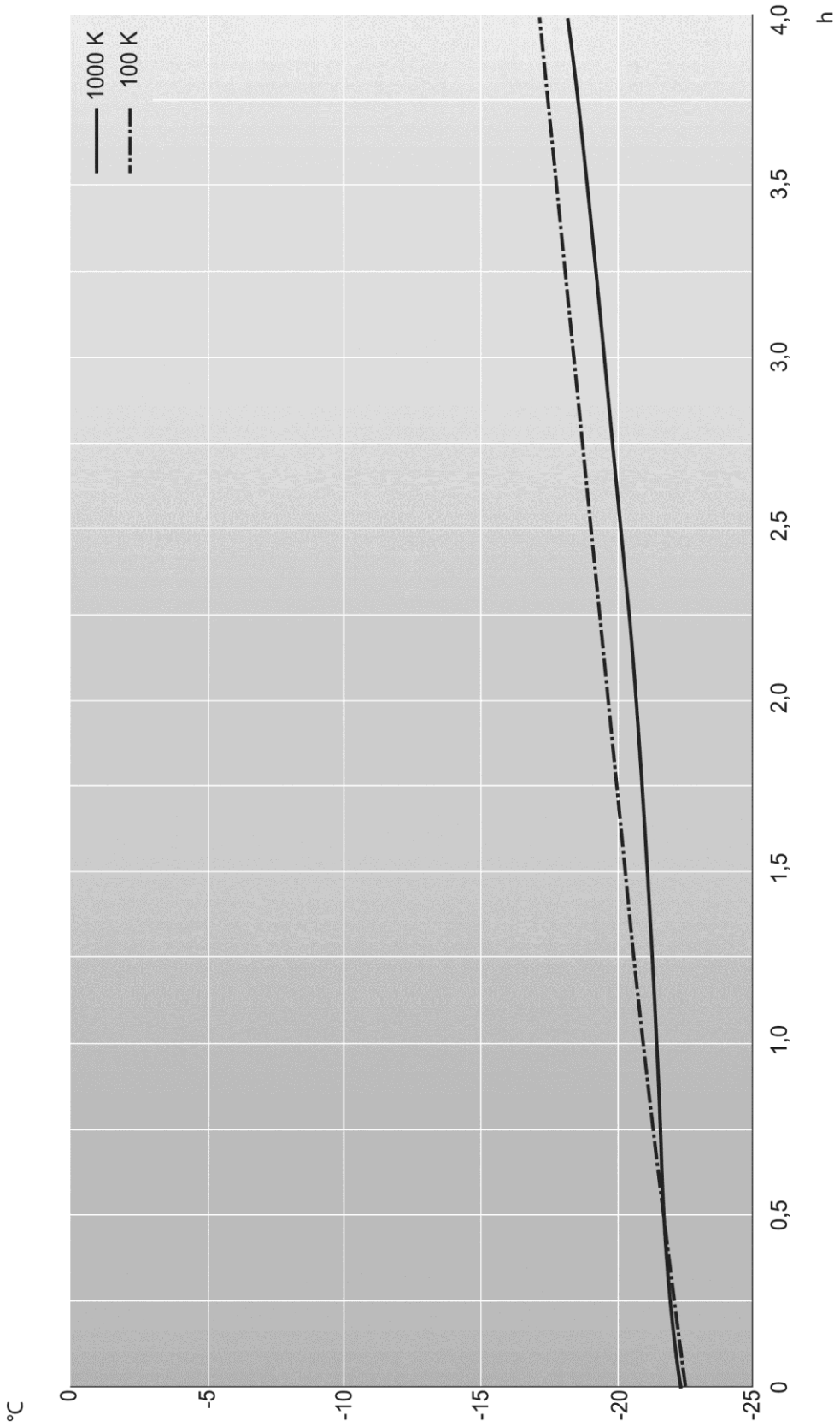


➢ Warm food: Place in GN containers at +85 °C; the temperature of the food should not fall below +65 °C. Consume the food no later than three hours after preparation, to minimise the risk of food poisoning.

 # Temperature profile for keeping food cold (cold operating condition)



 # Temperature profile for keeping food deep-frozen (deep-freeze operating condition)



5.2.2 TP 3000 U heatable and TP 3000, (stainless steel)

3000 U heatable
– circulating air heater

3000

Support rails: 30 pairs (seamlessly deep-drawn)

Configuration example: 5 x GN 1/1 200 mm

Designation Order no.	Capacity, maximum [Litres]	Heating capacity [W]	Outer dimensions L x W x H [mm]	kg	kg
TP 3000 U heatable 85 01 08 08 without CHECK 85 01 08 14 with CHECK	130	763 110 V version on request	592 x 769 x 1448	63	150
TP 3000 85 01 08 07 without CHECK 85 01 08 13 with CHECK	130	—	592 x 769 x 1448	59	150

Accessories:	Order no.
Cooling pellet stainless steel GN 1/1: 324 x 529 x 12.5 mm, asymmetrical	85 01 20 15
Cooling pellet stainless steel GN 1/1: 324 x 527 x 30 mm	85 01 20 02
Heating pellet stainless steel GN 1/1: 324 x 529 x 12.5 mm, asymmetrical	89 08 01 72
Insert frame with 1 long support for GN 4 x 1/4, 6 x 1/6 or 2 x 2/4	85 01 20 09
Insert frame with 2 cross supports for GN 9 x 1/9 or 6 x 1/6	85 01 20 10
Antistatic wheels, 4 pcs., diameter 125 mm	On request

Further information: See Rieber price guide,
www.rieber.de
Search: Price guide

5.2.3 TP 2000 U heatable and TP 2000, (stainless steel)

2000 U heatable
– circulating air heater

2000

Support rails: 20 pairs (seamlessly deep-drawn)

Configuration example: 3 x GN 1/1 200 mm; 1 x GN 1/1 100 mm

Designation Order no.	Capacity, maximum [Litres]	Heating capacity [W]	Outer dimensions L x W x H [mm]	kg	kg
TP 2000 U heatable 85 01 07 08 without CHECK 85 01 07 16 with CHECK	89.7	763 110 V version on request	492 x 769 x 1078	50	150
TP 2000 85 01 07 07 without CHECK 85 01 07 15 with CHECK	89.7	—	492 x 769 x 1078	46	150

Accessories:

See accessories on page 27

5.2.4 TP 3000 hybrid warm/cold active and warm/cold passive, (stainless steel)

warm

cold

TP 3000 hybrid warm active/cold active
– circulating air heater
– with active cooling

TP 3000 hybrid warm active/cold passive
– circulating air heater
– Cooling with cooling pellets

Support rails: 16 pairs (seamlessly deep-drawn) for warm
8 pairs (seamlessly deep-drawn) for cold

Configuration example: 6 x GN 1/1 100 mm for warm;
1 x GN 1/1 200 mm + 1 x GN 1/1 150 mm for cold

Designation Order no.	Capacity, maximum [Litres]	Heating capacity/ refrigeration capacity [W]	Outer dimensions L x W x H [mm]	kg	kg
TP 3000 hybrid warm active/cold active (with active cooling) 85 01 08 17 without CHECK 85 01 08 19 with CHECK	70 (warm) 44 (cold)	763 180	592 x 769 x 1648	78	150
TP 3000 hybrid warm active/cold passive (cooling with cooling pellets) 85 01 08 16 without CHECK 85 01 08 18 with CHECK	70 (warm) 44 (cold)	763 —	592 x 769 x 1448	64	150

Accessories:

See accessories on page 27

5.2.5 TP 1600 DU heatable, TP 1600 U heatable and TP 1600, (stainless steel)

TP 1600 DU heatable
– circulating air heater
– with lid

TP 1600 U
– circulating air heater

TP 1600

Support rails: 16 pairs (seamlessly deep-drawn)

Configuration example: 3 x GN 1/1 200 mm
2 x GN 1/1 200 mm, 1 x GN 1/1 150 mm

Designation Order no.	Capacity, maximum [Litres]	Heating capacity [W]	Outer dimensions L x W x H [mm]	kg	kg
TP 1600 DU heatable 85 01 09 03 without CHECK 85 01 09 08 with CHECK	78	763 110 V version on request	492 x 769 x 963	47	150
TP 1600 U heatable 85 01 06 09 without CHECK 85 01 06 04 with CHECK	70.4	763	492 x 769 x 930	45	150
TP 1600 85 01 06 08 without CHECK 85 01 06 13 with CHECK	70.4	—	492 x 769 x 930	41	150

Accessories:

See accessories on page 27

5.2.6 TP 1400 U heatable and TP 1400, (stainless steel)

TP 1400 U heatable
– circulating air heater

TP 1400

Support rails: 14 pairs (seamlessly deep-drawn)

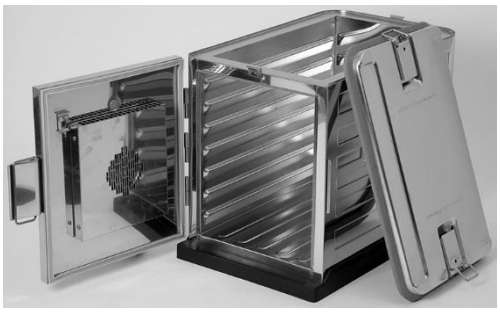
Configuration example: 2 x GN 1/1 200 mm
1 x GN 1/1 100 mm

Designation Order no.	Capacity, maximum [Litres]	Heating capacity [W]	Outer dimensions L x W x H [mm]	kg	kg
TP 1400 U heatable 85 01 11 02 without CHECK 85 01 11 04 with CHECK	63.7	763	492 x 769 x 793	42.5	75
TP 1400 85 01 11 01 without CHECK 85 01 11 03 with CHECK	63.7	—	492 x 769 x 793	38.5	75

Accessories:

See accessories on page 27

5.2.7 TP 1000 DU, TP 1000 H and TP 1000 N, (stainless steel)



TP 1000 DU heatable
– circulating air heater

TP 1000 H heatable
– circulating air heater

TP 1000 N

Support rails: 7 pairs (seamlessly deep-drawn) → for TP 1000 DU
8 pairs (seamlessly deep-drawn) → for TP 1000 H, TP 1000 N

Configuration example: 2 x GN 1/1 200 mm → for TP 1000 DU
1 x GN 1/1 200 mm, 1 x GN 1/1 150 mm → for TP 1000 H, TP 1000 N

Designation Order no.	Capacity, maximum [Litres]	Heating capacity [W]	Outer dimensions L x W x H [mm]	kg	kg
TP 1000 DU heatable 85 01 05 03 without CHECK 85 01 05 04 with CHECK	52	763	410 x 645 x 530	32	80
TP 1000 H heatable 85 01 04 05 without CHECK 85 01 04 09 with CHECK	44.4	763	410 x 655 x 470	20	80
TP 1000 N 85 01 04 04 without CHECK 85 01 04 08 with CHECK	44.4	—	410 x 655 x 470	17	80

Accessories: Order no.

Stainless steel chassis 88 14 01 07
460 x 670 x 305 mm
Stainless steel with plastic corner bumpers, 2 swivel castors and 2 plastic fixed castors, diameter 125 mm, weight 7 kg

More: See accessories on page 27, 45

5.2.8 TP 105 L, (stainless steel)

TP 105 L heatable
– Surface heating in floor area of carcass and around 2/3 height of sides

Support rails: —

Configuration example: 1 x GN 1/1 200 mm

Designation Order no.	Capacity, maximum [Litres]	Heating capacity [W]	Outer dimensions L x W x H [mm]	kg	kg
[2]TP 105 L heatable 85 01 03 02 without CHECK with CHECK on request	26	500	400 x 600 x 306	13.5	45

[2] All-round external physiologically harmless seal. Hygiene version H2

5.2.9 TP actively cooled, (mobile, made of stainless steel)

TP 3000 K cooled
– with circulation fan

TP 2000 K cooled
– with circulation fan

TP 1600 K cooled
– with circulation fan

TP 1000 C cooled
– with circulation fan

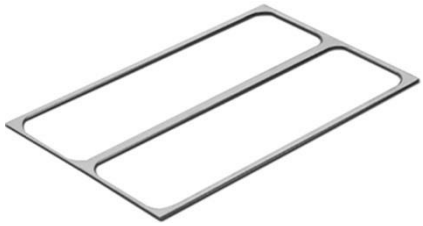
Support rails:
30 pairs (seamlessly deep-drawn) → for TP 3000 K cooled
20 pairs (seamlessly deep-drawn) → for TP 2000 K cooled
16 pairs (seamlessly deep-drawn) → for TP 1600 K cooled
8 pairs (seamlessly deep-drawn) → for TP 1000 K cooled

Configuration example:
5 x GN 1/1 200 mm → for TP 3000 K cooled
3 x GN 1/1 200 mm, 1 x GN 1/1 100 mm → for TP 2000 K cooled
2 x GN 1/1 200 mm, 1 x GN 1/1 150 mm → for TP 1600 K cooled
1 x GN 1/1 200 mm, 1 x GN 1/1 150 mm → for TP 1000 C cooled

Designation Order no.	Capacity, maximum [Litres]	Connected load Refrigerating capacity [W]	Outer dimensions L x W x H [mm]	kg	kg
TP 3000 K actively cooled 85 01 08 10 without CHECK 85 01 08 15 with CHECK 85 01 08 20 R290	130	170 180 at VT -10 °C	592 x 769 x 1648	100	130
TP 2000 K actively cooled 85 01 07 10 without CHECK 85 01 07 17 with CHECK 85 01 07 18 R290	89.7	170 180 at VT -10 °C	492 x 769 x 1278	80	85
TP 1600 K actively cooled 85 01 06 10 without CHECK 85 01 06 15 with CHECK 85 01 06 16 R290	70.4	170 180 at VT -10 °C	492 x 769 x 1130	50	62
TP 1000 C actively cooled 85 01 04 06 without CHECK 85 01 04 10 with CHECK	44.4	250 119 at VT -10 °C	410 x 655 x 760	37	44

Accessories:	Order no.
Insert frame with 1 long support for GN 4 x 1/4, 6 x 1/6 or 2 x 2/4	85 01 20 09
Insert frame with 2 cross supports for GN 9 x 1/9 or 6 x 1/6	85 01 20 10
Antistatic wheels, 4 pcs., diameter 125 mm	On request

Further information: See Rieber price guide,
www.rieber.de
Search: Price guide



Insert frame with 1 long support for GN

Insert frame with 2 cross supports for GN

5.2.10 TP 6000 for banquet solutions, (mobile, made of plastic)

example

TP 6000 KB maxi (heatable), (– circulating air heater),
TP 6000 K maxi (unheated), mobile

TP 6000 K Maxi (unheated),
TP 6000 K maxi (unheated), mobile

2 x thermoport® comprising non-porous plastic skin, fixed, with fitted castors, diameter 125 mm at bottom of TP

Support rails: 12 pairs (seamlessly deep-drawn)

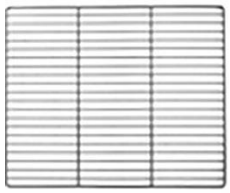
Configuration example: 8 x GN 1/1 200 mm

Designation Order no.	Load capacity, max. [Litres]	Heating capacity [W]	Outer dimensions L x W x H [mm]	kg	kg
TP 6000 Maxi KB heatable, mobile without CHECK : 85 02 08 04 orange 85 02 08 07 black with CHECK on request	104 104	500 —	766 x 790 x 1280	59.7	75
TP 6000 Maxi K, mobile without CHECK : 85 02 08 02 orange 85 02 08 12 black with CHECK on request	104 104	— —	766 x 790 x 1280	56.5	75

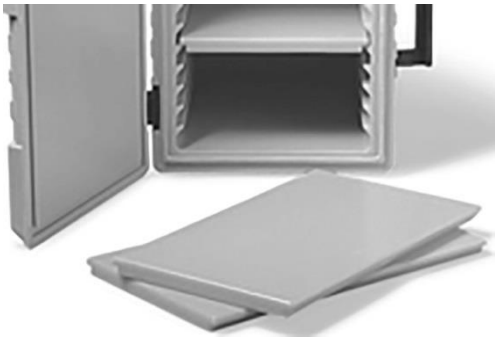
	Order no.
Accessories:	
Grid GN 2/1, stainless steel lightweight version	84 14 01 06
Insulated divider → for TP 6000 K unheated	85 02 20 12 orange 85 02 20 69 black
Cooling pellet GN 1/1 plastic for TP 6000 K unheated	85 02 20 38 orange 85 02 20 67 black
Heating pellet stainless steel GN 1/1: 324 x 529 x 12.5 mm, asymmetrical	89 08 01 72
Insert frame with 1 long support for GN 4 x 1/4, 6 x 1/6 or 2 x 2/4	85 01 20 09
Insert frame with 2 cross supports for GN 9 x 1/9 or 6 x 1/6	85 01 20 10
Tray rack 6000 for EURO baker dimension (option), stainless steel, to take inserts with dimensions 600 x 400 mm, 8 pairs of support rails	85 02 20 44
Stacking lock	85 02 20 61

Further information: See Rieber price guide,
www.rieber.de
Search: Price guide

Example

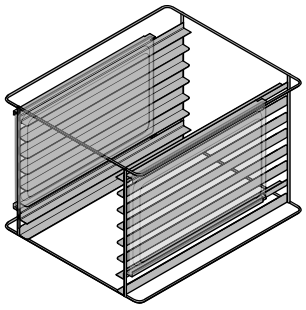


Grid GN 2/1, stainless steel



Insulated divider

Example



Tray rack 6000
– acceptance of pellets on both sides

Stacking lock

5.2.11 TP 6000 KB heatable and TP 6000 K, (plastic)

TP 6000 KB heatable
– circulating air heater

TP 6000 K

Support rails: 12 pairs (seamlessly deep-drawn)

Configuration example: 4 x GN 1/1 200 mm

Designation Order no.	Load capacity, max. [Litres]	Heating capacity [W]	Outer dimensions L x W x H [mm]	kg	kg
TP 6000 KB-A heatable without CHECK : 85 02 08 13 orange 85 02 08 14 black with CHECK on request	104	500	645 x 790 x 560	23	75
TP 6000 KB heatable without CHECK : 85 02 08 15 orange 85 02 08 16 black with CHECK on request					
TP 6000 K without CHECK : 85 02 08 01 orange 85 02 08 05 black with CHECK on request	104	—	645 x 790 x 560	21	75

Accessories:	Order no.
Insulated divider → for TP 6000 K unheated	85 02 20 12 orange 85 02 20 69 black
Cooling pellet GN 1/1 plastic → for TP 6000 K unheated	85 02 20 38 orange 85 02 20 67 black
Heating pellet stainless steel GN 1/1: 324 x 529 x 12.5 mm, asymmetrical	89 08 01 72
Insert frame with 1 long support for GN 4 x 1/4, 6 x 1/6 or 2 x 2/4	85 01 20 09
Insert frame with 2 cross supports for GN 9 x 1/9 or 6 x 1/6	85 01 20 10
Stacking lock	85 02 20 61
Rustproof castors	88 14 01 04
Tray rack for TP 6000 Stainless steel, to take inserts with dimensions 600 x 400 mm, 8 pairs of support rails	85 02 20 44

5.2.12 TP 4.0 1000 KB circulating air and TP 1000 K, (plastic)

TP 1000 KB heatable
– circulating air heater

TP 1000 K

Support rails: 12 pairs (seamlessly deep-drawn)

Configuration example: 2 x GN 1/1 200 mm

Designation Order no.	Capacity, maximum [Litres]	Heating capacity [W]	Outer dimensions L x W x H [mm]	kg	kg
Heatable TP 1000 KB with digital circulating air heater without CHECK : 85 02 04 23 orange 85 02 04 24 black with CHECK : 85 02 04 26 orange 85 02 04 28 black	52	763	435 x 688 x 561	17.6	65
TP 1000 K without CHECK : 85 02 04 01 orange 85 02 04 12 black with CHECK : 85 02 04 25 orange 85 02 04 27 black	52	—	435 x 688 x 561	12	65

Accessories:

	Order no.
Chassis KS	88 14 01 05
	88 14 01 06

Page 46 et seq.

More: Page 38

5.2.13 TP 1000 K cool, (made of plastic)

TP 1000 K cool
– circulating air cooling

Support rails: 12 pairs (seamlessly deep-drawn)

Configuration example: 2 x GN 1/1 200 mm

Designation Order no.	Capacity, maximum	Connected load Refrigerating capacity	Outer dimensions		
	[Litres]	[W]	L x W x H [mm]	kg	kg
TP 1000 K cool with digital circulating air cooling without CHECK: 85 02 04 40 orange	52	72 50 bei VT -10 °C	435 x 760 x 561	19,6	65

Weight including refrigeration unit 19.6 kg. Weight of refrigeration unit 5.6 kg

Accessories:

	Order no.
Chassis KS	88 14 01 05
	88 14 01 06

Page 46 et seqq.

More: Page 38

5.2.14 TP 600 KB and TP 600 K (plastic)

TP 600 KB heatable
– circulating air heater

TP 600 K

Support rails: 7 pairs (seamlessly deep-drawn)

Configuration example: 1 x GN 1/1 200 mm
1 x GN 1/1 65 mm

Designation Order no.	Capacity, maximum [Litres]	Heating capacity [W]	Outer dimensions L x W x H [mm]	kg	kg
TP 600 KB heatable without CHECK : 85 02 05 24 orange 85 02 05 25 black with CHECK on request	33	240	420 x 645 x 390	11	45
TP 600 K without CHECK : 85 02 05 05 orange 85 02 05 18 black with CHECK on request	33	—	420 x 645 x 386	9.2	45

Accessories:	Order no.
Insert frame with 1 long support for GN 4 x 1/4, 6 x 1/6 or 2 x 2/4	85 01 20 09
Insert frame with 2 cross supports for GN 9 x 1/9 or 6 x 1/6	85 01 20 10
Chassis KS	88 14 01 05 88 14 01 06
Page 46 et seq.	
Cooling pellet GN 1/1 plastic	85 02 20 38 orange 85 02 20 67 black 89 08 01 72
Heating pellet stainless steel GN 1/1: 324 x 529 x 12.5 mm, asymmetrical	
Insulated divider	85 02 20 12 orange 85 02 20 69 black

Further information: See Rieber price guide,
www.rieber.de
Search: Price guide

5.2.15 TP 100 K hybrid, TP 100 KB heatable, TP 100 K and TP 100 KB-CNS, (plastic)

TP 100 K hybrid

– passive cooling with insulated divider

TP 100 KB heatable
– Rod heating, statically heatable
– dry and wet

TP 100 K

TP 100 KB-CNS heatable
– internal muffle comprising chromium-nickel steel
– surface heating

Support rails: —

Configuration example: 2 x GN 2/3 065, 2 x GN 2/3 055, 2 x GN 1/3 065, 1 x GN 1/3 100 → for TP 100 K hybrid.

1 x GN 1/1 200 mm → for TP 100 KB heatable and TP 100 K

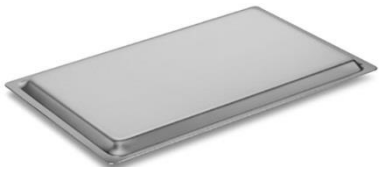
Designation Order no.	Capacity, maximum [Litres]	Heating capacity [W]	Outer dimensions L x W x H [mm]	kg	kg
TP 100 K hybrid without CHECK : 85 02 03 53 orange 85 02 03 54 black with CHECK : 85 02 03 60 orange 85 02 03 61 black	26	—	690 x 425 x 364	8	40
TP 100 KB heatable without CHECK : 85 02 03 13 orange 85 02 03 29 black with CHECK : 85 02 03 57 orange 85 02 03 58 black	26	240	370 x 645 x 308	8.3	40
TP 100 K without CHECK : 85 02 03 01 orange 85 02 03 28 black with CHECK : 85 02 03 55 orange 85 02 03 56 black	26	—	370 x 645 x 308	7.2	40
TP 100 KB-CNS heatable without CHECK : 85 02 03 52 orange	26	385	370 x 645 x 308	8.3	40

	Order no.
Accessories:	
Lid without cooling plate → for TP 100 KB and TP 100 K	85 02 25 56 orange 85 02 25 57 black
Cooling pellet GN 1/1 plastic	85 02 20 38 orange 85 02 20 67 black
Heating pellet stainless steel GN 1/2: 323 x 263 x 12.5 mm, asymmetrical	89 08 01 71
Heating pellet stainless steel GN 1/1: 324 x 529 x 12.5 mm, asymmetrical → for TP 100 K hybrid	89 08 01 72
Sealing plug → for TP 100 KB and TP 100 K	85 02 20 59 orange
Isosteg → for TP 100 hybrid The use of an isosteg enables division into warm and cold areas.	85 02 20 42 orange
Sealing plug → for TP 100 K and TP 500 K	37 13 08 41
Horizontal frame (without spring) → for TP 100 K and TP 50 K	84 19 02 02

Further information: See Rieber price guide,
www.rieber.de
Search: Price guide

Lid without cooling plate

Plastic cooling pellet



Stainless steel heating pellet

Sealing plug (for sealing the TP when rod heating is disassembled)

Horizontal frame for TP 100/50 K (for dividing heated wells, so that smaller containers, e.g. GN ¼, can be used.

5.2.16 TP 50 KB heatable, TP 50 K, (plastic)

TP 50 KB heatable
– Rod heating, statically heatable, dry and wet

TP 50 K

Support rails: —

Configuration example: 1 x GN 1/1 100 mm

Designation Order no.	Capacity, maximum [Litres]	Heating capacity [W]	Outer dimensions L x W x H [mm]	kg	kg
TP 50 KB heatable without CHECK : 85 02 02 06 orange 85 02 02 17 black with CHECK : 85 02 02 24 orange 85 02 02 25 black	11.7	240	370 x 645 x 240	7.3	40
TP 50 K without CHECK : 85 02 02 01 orange 85 02 02 16 black with CHECK : 85 02 02 22 orange 85 02 02 23 black	11.7	—	370 x 645 x 240	6.9	40

Accessories:

See accessories on previous page

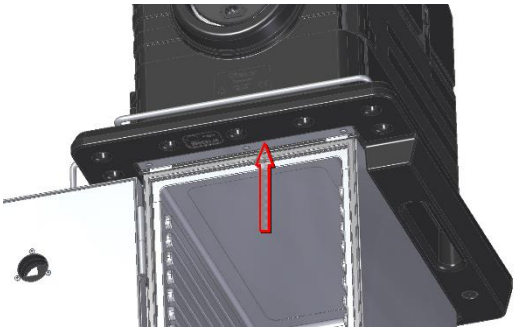
5.3 Information on accessories

5.3.1 Transport safety

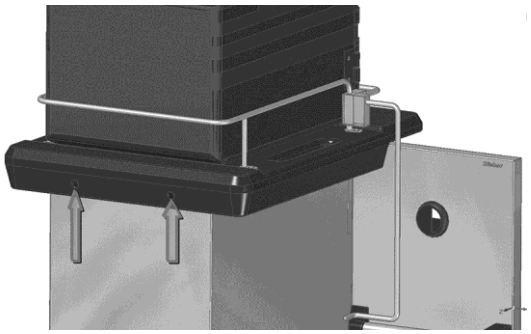
User tip

- When transporting the Rieber stainless steel thermoport®, use the transport safety device from Rieber.
  Highly recommended for transport by HGV.
- How to stack the TP. Large recessed grips facilitate handling.

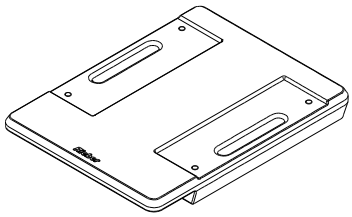
Example



Fixing by means of profile in the door groove

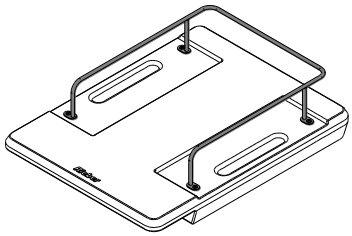


Additional fixing with 2x pressure screws possible, for example for transport by HGV.



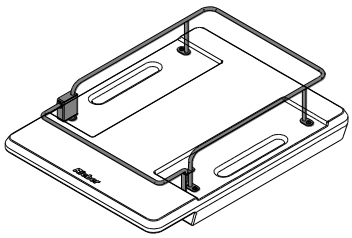
Version: Standard

Suitable for the stainless steel **thermoport**® from Rieber.
L x W x H: 769 x 592 x 90 mm
Order no.: 85012053



Version: …with guard rail

L x W x H: 769 x 592 x 90 + 107 mm
Order no. 85012053 + 85100203 /Only available in conjunction with "standard" version, guard rail not available separately.



Version: …with guard rail & fastening clip

Order no. 85012053 + 85100202

5.3.2 Transport/serving trolley

 # MOBILE APPLIANCES“ …little helpers

Transport/serving trolley in plastic and stainless steel

PW-TH-RP /Rolliport,
→ for all portable **thermoport** ®; with foldable push handle in stainless steel

TH-TA-1
→ for 1 **thermoport**®

TH-TA-2
→ for 2 **thermoport**®

TH-TA-3
→ for 3 **thermoport**®

Designation Order no.	Outer dimensions L x W x H [mm]	kg	kg
PW-TH-RP 88 07 06 01	850 x 470 x 890	9	100
TH-TA-1 88 15 01 01	711 x 705 x 840	14	80
TH-TA-2 88 15 02 01	1246 x 705 x 840	21	130
TH-TA-3 88 15 03 01	1781 x 705 x 840	27	210

Antistatic wheels, 4 pcs, diameter 125 mm. on request

Further information: See Rieber price guide, "TRANSPORTATION" chapter
www.rieber.de
Search: Price guide

Chassis KS

88 14 01 06

88 14 01 05

Chassis KS
Stainless steel with plastic corner bumpers, 2 swivel castors and 2 fixed castors in plastic, diameter 125 mm
→ for TP 1000

Designation Order no.	Outer dimensions L x W x H [mm]	kg	kg
Chassis KS 88 14 01 05 → Designed to be assembled with TP. To this purpose, loosen the stack slide rail. → Insert 2 space strips into the moulding in the plastic TP. Order no. 55 01 69 01 → Connect the chassis to the TP with the screws.	640 x 490 x 210	6.2	85
Chassis KS 88 14 01 06 → Place TP on the chassis	640 x 490 x 210	4.7	85

5.3.3 gastronorm360 OPERATING SYSTEM

User tip

With the right accessories, **thermoport**® is energy-saving, and the appliance can be used for a wider range of applications.

- Use GN containers with watertight lids from Rieber.
- Use **thermoplates**® with watertight lids from Rieber.
- Use Rieber **heating pellets** for keeping food warm.
- **Use Rieber cooling pellets for keeping food cold.**

Further information: See Rieber price guide, chapter "gastronorm360 OPERATING SYSTEM"

www.rieber.de
Search: Price guide

5.3.4 The mobile catering® kitchen

catering® kitchen
On request

Examples

5.3.5 CHECK HACCP

In the area of HACCP documentation the CHECK CLOUD platform offers the CHECK HACCP digital system, for simple, safe and transparent temperature detection. In addition to this, further digital features are possible in the area of hygiene and service management. The automated digital answer to the analogue paper trail.

The HACCP-relevant data are recorded using two different methods:
Mobile CHECK and Auto CHECK. The browser-based CHECK Cockpit enables the management, visualisation and evaluation of the collected process data.

- Mobile CHECK: Manual temperature measurement using bluetooth-capable core temperature sensor and CHECK app. Simple hygiene and service management with flexible, individually adaptable checklists and additional photo and text function via the CHECK app.
- Auto CHECK: Retrofittable or permanently installed sensors, which send data to the database at predefined intervals.

Further information: See "Services" under
www.rieber.de
Please contact Rieber customer service.

5.3.6 Excerpt from the Rieber price guide

- Rieber Normset Gastronorm container range
- Rieber lid range for GN containers
- Trays, grilles, stacking shelves
- Supports
- Shelves, EC Gastronorm containers
- Rieber thermoplates® range with angular corners (from -20 °C to +220 °C)
- Rieber thermoplates® accessories (for thermoplates® with angular corners)
- Rieber thermoplates® C Buffet range – with rounded corners
- … Lid range accessories
- kitchenware containers, kitchenware lid range, Rieber kitchenware sets

The Rieber price guide provides further information about a wide variety of accessories.
www.rieber.de
Search: Price guide

6 Useful information on delivery and initial cleaning

This chapter describes the measures to be taken before use.

 # Devices with refrigerant R290 are considered dangerous goods and should be treated in accordance with DIN EN 378-1: 2020-12!

 # Check/deal with any transport damage

- Immediately after delivery, visually check the appliance for any transport damage.
- Document any potential transport damage on the consignment note in the presence of the haulage contractor. Have the damage confirmed by the haulage contractor (with signature).
- Decide if you wish to keep the appliance and report the defect using the consignment note, or if you wish to reject the appliance.

  By following this procedure you will ensure proper claim settlement.

 # Unpacking

- Open the transport packaging at the positions provided for this purpose. Do not tear or cut.
- Remove any packaging remnants.

 # Unload device

Transport with high physical demands should be avoided where possible, as the risk of an accident or injury is higher.

Lift / deposit a heavy load evenly with your knees bent and your upper body straight and upright. Your feet should be at least hip-width apart and your abdominal muscles braced. Breathe out. Do not twist your spine.

ATTENTION

- Transport the appliance horizontally, as in its working position.
- Do not use aids such as forklift trucks to unload and transport the appliance, as this may cause damage.

 # First cleaning

ATTENTION

Protective foils or heat-sensitive objects at/in the appliance might damage the appliance during heating.

- Ensure that there are no protective foils on the inside or outside of the appliance.

'Cleaning, maintenance and care', page 62

 # Information about packaging material

- Dispose of the disposable packaging with respect for the environment.

7 Notes on use

7.1 Safety information with regard to use

⚠ Keep to the basic rules for operating the product

- Only transport food and liquids closed. Protect thermoport® electrical appliances against moisture, otherwise liquid could penetrate the circulating air heater or the refrigeration unit, for example. We recommend: Use containers with watertight press-in lids such as thermoplates ® and Gastronorm containers from Rieber.
- Use the TP under supervision.
- Only operate the TP with adequate lighting.
- Warm food: Place in GN containers at +85 °C; the temperature of the food should not fall below +65 °C. Consume the food no later than three hours after preparation, to minimise the risk of food poisoning.
- Cold food: Keeping cold at +2 °C to +8 °C.
  Keeping cold means: Keeping pre-chilled food at storage temperature.
  Place in GN containers as cold as possible; the temperature of the food should not exceed +7 °C.

Chapter 'Purpose', page 18 ff.

*Chapter 'Insulating behaviour of **thermoport®**', page 23 ff.*

⚠ Avoid risks from electricity

Risks when transporting open liquids and food, which could penetrate the circulating air heater of the heatable TP or the circulation fan of the actively cooled TP.

- **⚠ Danger of electric shock. Risk of death**
  Before cleaning always disconnect the TP from the power, then dismount the removable heating unit or removable refrigeration unit. Wipe electrical parts **with a slightly damp cloth** and use a dry **cloth to rub dry**.
- **⚠ Danger of electric shock. Risk of death**
  Keep the TP 1000 K cool away from moisture. Only use inside buildings.
- Only transport food and liquids in tightly sealed containers.
- We recommend: Use GN containers with watertight press-in lids from Rieber and **thermoplates®**.

*Chapter 'Information on accessories ', page 45 ff., section "**gastronorm**360 OPERATING SYSTEM"*

- Inspect the appliance before use, particularly the connecting plug and electric cable for any visible signs of damage.

WARNING

If the residual current operated device is not pre-switched or is defective, cable fire and personal injuries can result.
Peak currents occur if lots of devices are switched on and off simultaneously.

- Connect the TP to a socket with a pre-switched FI circuit breaker (RCD) with a tripping current of 30 mA.
- Do not connect the appliance to a distributor strip.

⚠ Reduce risks due to unstable position

- **Load** the appliance from bottom to top.
  Unload the appliance from top to bottom.
  Ensure optimal safety against overturning.
- Ensure stable positioning of the thermoport®.
  Example of TP 1000 KB: For one appliance, place this far enough back from the installation edge so that when it is emptied the door can rest on the installation surface.

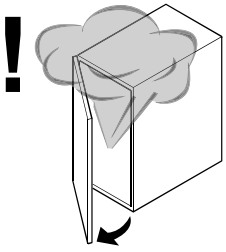
⚠ Reduce risks during transport

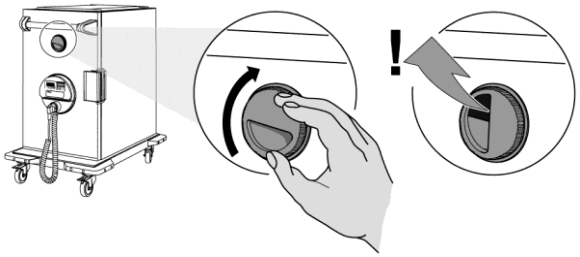
- Transport TP with closed door/lid and mains plug disconnected.
- Use the options provided by the Rieber transport equipment *range.*

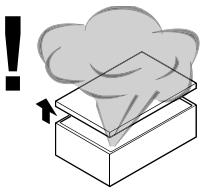
Chapter 'Information on accessories ', page 45

⚠ Risks from burning and scalding

- **Risks of scalds to face and hands.**
  Allow the hot steam to escape if necessary, before opening the heatable TP. Do this by opening the steam valve, for example. Open the lid/door carefully.







- Wear personal protective equipment and protective gloves in order to avoid burns to the hands and arms.

⚠ Installation and removal of the heating unit

Chapter 'Heatable TP', page 67

⚠ What should you do if the circulating air heater is soiled?

Chapter 'Personnel qualification requirements', page 10

Chapter 'Heatable TP', page 67

7.2 Advance heating/cooling of the thermoport®

 # TP can be heated/chilled as required in the heating cabinet or cold store

➢ Heat or cool the TP in a heating cabinet or cold store, in the range between **+2 °C** and **+85 °C**. Do not set or store at a lower temperature, otherwise stray electrical currents may result due to condensation water. These can be hazardous. Only use in dry areas and ambient conditions.

User tip

➢ Use the options for keeping warm with heating pellets and for keeping cold with cooling pellets. Use accessories from Rieber.

Chapter 'Information on accessories ', page 45

 # Electrically heat/cool TP

User tip

The operating temperature of the empty appliance is reached after a preheating or precooling time of **around 20 minutes** under normal ambient conditions.

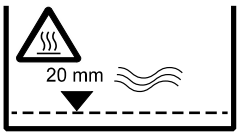
➢ Limit yourself to the necessary heating/cooling time. More time would only waste unnecessary energy.

 # Some TPs can be used as a bain-marie

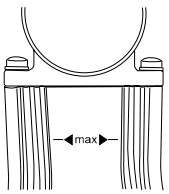
→ Applies to: TP 105 L, TP 100 KB-CNS … with surface heating

→ Applies to: TP 100 KB, TP 50 KB … with rod heating

Bain-Marie



The following is indicated on the top of the container:
→ Hot surface
→ For 'wet heating' pour 2 cm of water into the bain-marie



The following is indicated on the heater element:
→ Maximum water level
→ Protection class IPX3. Protection against falling spray water up to 60° from vertical
→ Observe the operating instructions

TP 50 KB or TP 100 KB heatable

➢ Pour water in. A level of around 2 cm is sufficient.

➢ Preheat for around 20 minutes.

➢ Use GN containers with press-in lids from Rieber.

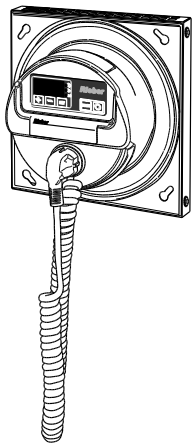
7.3 Temperature regulation for circulating air heating

7.3.1 … with bayonet fitting

Circulating air heater for
stainless steel TP.

Heating temperature adjustable
from +20 °C to +100 °C

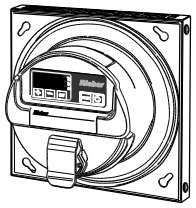
Example



→ Applies to: TP 3000 U, TP 2000 U, TP 3000 hybrid,
TP 1600 DU, TP 1600 U, TP 1400 U, TP 1000 DU, TP 1000 H

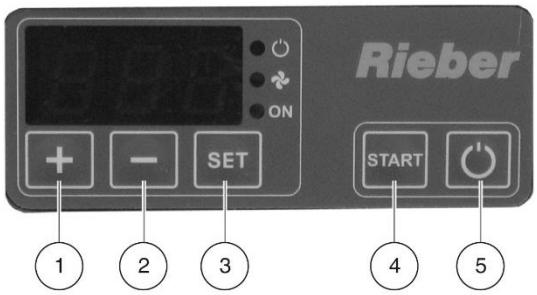
Circulating air heater for
plastic TP.

Heating temperature adjustable
from +20 °C to +85 °C



→ Applies to: TP 4.0 1000 KB circulating air

 # Brief description



- For electrically-switched devices, the ACTUAL temperature is shown in the control panel.
- The set temperature can be permanently stored. The set temperature can be temporarily changed.

 # Electrical connection of the appliance

➢ Plug in the electric connecting plug.

 # Switch the appliance on

➢ Turn the appliance on by pressing the POWER ON (5) button.

▌ The display shows the ACTUAL temperature.

➢ Press the SET button (3) to display the SET temperature.

 # Adjust set temperature

➢ To change the set temperature, keep the SET button pressed and adjust the value with the buttons (1) and (2).

➢ Press the START button (4).

▌ The set value is saved.

▌ This value remains stored after a power failure.

 # Temporarily change set temperature

➢ To change the set temperature, keep the SET button pressed and adjust the value with the buttons (1) and (2).

▌ This value does not remain stored after a power failure.

 # Switch the appliance off

➢ Turn the appliance off by pressing the POWER ON button (5).

▌ Empty display, no LED will light up.

▌ The appliance is not disconnected from the power.

➢ Alternatively, disconnect the appliance from the power.

 # Disconnect the appliance from the power

➢ Pull out the electrical connector from the socket. If the appliance has a holder to take the electrical connector (dummy connector), insert the connector into this holder.

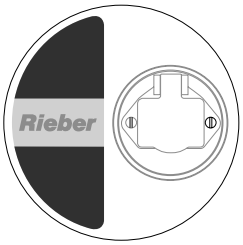
▌ The appliance is de-energised.

7.3.2 … with click fitting

Circulating air heater for **plastic TP**.

There are no setting options.

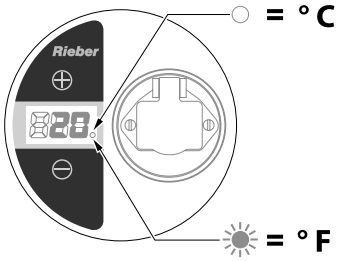
Heating temperature up to +85 °C



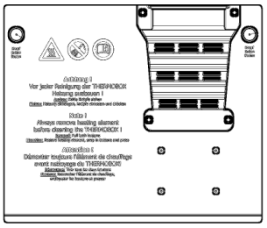
→ Applies to: TP 6000 KB, TP 1000 KB-A, TP 600 KB-A

Circulating air heater for **plastic TP**.

Heating temperature can be regulated between +20 °C and +85 °C.



→ Applies to: TP 6000 KB, TP 1000 KB-D, TP 600 KB-D



switch ON/OFF

➢ The circulating air heating starts to heat from the connection to the power supply.

▌ The temperature inside an empty thermoport® can be about +80 °C after roughly 40 minutes at normal ambient conditions.

Temperature display

- The temperature shown on the display is the actual value.
- The displayed value can be between +20 and +85 °C.
  At a temperature outside of this range, a fault is displayed → **Cdc**.

Set temperature

➢ If you wish to change the SET temperature, tap the button.

▌ During setting, 3 points are lit at the bottom edge of the display.

▌ The target temperature can be changed at a click.
If no button is pressed for 3 seconds, the heating reverts back to normal mode (point stops flashing). The newly set temperature is applied as the target temperature.

➢ If a target temperature is set below +20 °C, then the OFF symbol is shown in the display.

▌ In this mode, only the fan is operated to circulate the air inside. The heating is off.

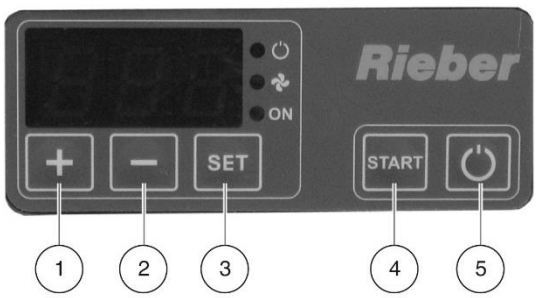
Display in degrees Celsius °C or Fahrenheit F

➢ By pressing both buttons at the same time for about 3 seconds, you can change display of the temperature unit.

▌ LED is permanently lit = display in Fahrenheit °F

▌ LED is not lit = display in degrees Celsius °C

7.4 Temperature regulation for TP, actively refrigerated (stainless steel)



- For electrically-switched devices, the ACTUAL temperature is shown in the control panel.
- The set temperature can be permanently stored. The set temperature can be temporarily changed.
- For appliances for keeping food cold, the LED in the top right indicates whether the compressor is running.

 # Switch the appliance on

➢ Turn the appliance on by pressing the POWER ON (5) button.

▌ The display shows the ACTUAL temperature.

➢ Press the SET button (3) to display the SET temperature.

 # Adjust set temperature

Set temperature can be adjusted from +1 to +15 °C.

➢ To change the set temperature, keep the SET button pressed and adjust the value with the buttons (1) and (2).

➢ Press the START button (4).

▌ The set value is saved.

▌ This value remains stored after a power failure.

 # Temporarily change set temperature

➢ To change the set temperature, keep the SET button pressed and adjust the value with the buttons (1) and (2).

▌ This value does not remain stored after a power failure.

 # Switch the appliance off

➢ Turn the appliance off by pressing the POWER ON button (5).

▌ Empty display, no LED will light up.

▌ The appliance is not disconnected from the power.

➢ Alternatively, disconnect the appliance from the power.

 # Disconnect the appliance from the power

➢ Pull out the electrical connector from the socket. If the appliance has a holder to take the electrical connector (dummy connector), insert the connector into this holder.

▌ The appliance is de-energised.

7.5 Temperature controller for TP actively cooled, (made of plastic)

- If the appliance is electrically connected, "OFF" is displayed on the control.
- The set temperature can be permanently stored. The set temperature can be temporarily changed.
- The top row of symbols indicates:
  The appliance is active, the cooling compressor is running, the fans are running.

 # Switch the appliance on

➢ Turn the appliance on electrically by keeping the POWER ON (6) button pressed for approx. five seconds.

▌ The compressor is running. The display shows the ACTUAL temperature.

 # Adjust set temperature

Set temperature can be adjusted from +1 to +15 °C.

➢ Briefly press the SET button to display the actual temperature.

▌ The current value is displayed.

➢ To change the set temperature, keep the SET button pressed for approx. five seconds and use buttons (4) or (5) to edit the value. Then confirm the value by briefly pressing the SET button.

▌ The set value is saved.

 # Switch the appliance off

➢ Switch the appliance off by keeping the POWER ON (6) button pressed for approx. five seconds, until "OFF" appears on the display.

▌ "OFF" is shown on the display.

▌ The appliance is not disconnected from the power.

 # Disconnect the appliance from the power

➢ Pull out the electrical connector from the socket.

▌ The appliance is de-energised.

7.6 Active keeping cold

TP for keeping chilled food and beverages cold. Keeping cold at + 2 °C to + 8 °C. Keeping pre-chilled food at storage temperature.

Control

See page 56

- Only fill the TP with adequately pre-chilled, packaged/wrapped food.
- Leave free space in the appliance. Due to the air convection and the filling state of the appliance, the ACTUAL temperature may deviate from the control temperature.
- Open the door/lid for filling or removal for as short a time as possible.
- Move and chill the food correctly daily after use, switch off and clean the TP.

7.7 Some TPs can be used as bain-maries

→ Applies to: TP 105 L, TP 100 KB-CNS … with surface heating

→ Applies to: TP 100 KB, TP 50 KB … with rod heating

See Chapter 'Advance heating/cooling of the thermoport®', page 52

- ⚠ **Risk of scalding**
  Before pouring water into the hot bain-marie, allow it to cool down first of all. Open the lid carefully and allow steam to escape at the side.

7.8 Placing food in the containers

Note on warm food:

- Place in GN containers at +85 °C; the temperature of the food should not fall below +65 °C.

Note on cold food:

Keeping cold at +2 °C to +8 °C
Keeping cold means: Keeping pre-chilled food at storage temperature.

- Ensure food is as cold as possible when placing in the GN containers; the temperature of the food should not exceed +7 °C.

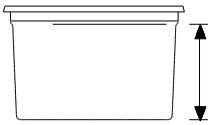
Always transport food closed or covered

- Only transport food and liquids in tightly sealed containers.

User tip

Use GN containers from Rieber.

- Seal GN containers containing liquid food using a water-tight plug lid with all-round silicone seal.
- Fill GN container up to the edge of the stacking shoulder.
  Do not fill up to the top edge to avoid the lid resting on the meal or in the sauce.

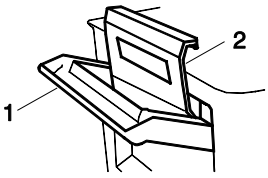


- Immediately after filling the appliance close it and do not open again until just before serving.
- After removal, close the door/lid immediately.

7.9 TP transport

- ⚠ **Risk of scalding**
  Hot liquids could slop out. Transport horizontally. Use GN containers with watertight press-in lids from Rieber. Close door/lid.
- ⚠ **Risk of tipping when stacking**
  Make sure that the stacking runners of the upper TP are located in the guides of the lower TP. Only stack with closed lid/door.
- We recommend only stacking 2 TPs on top of each other.
- Only transport the TP with the mains plug disconnected.
- Hold it at the fold-out carrying handles (1), not at the fastening clip (2) of the lid. Only carry 1 appliance at a time, unstacked.

Example



- User tip: Use the Rieber transport equipment range.

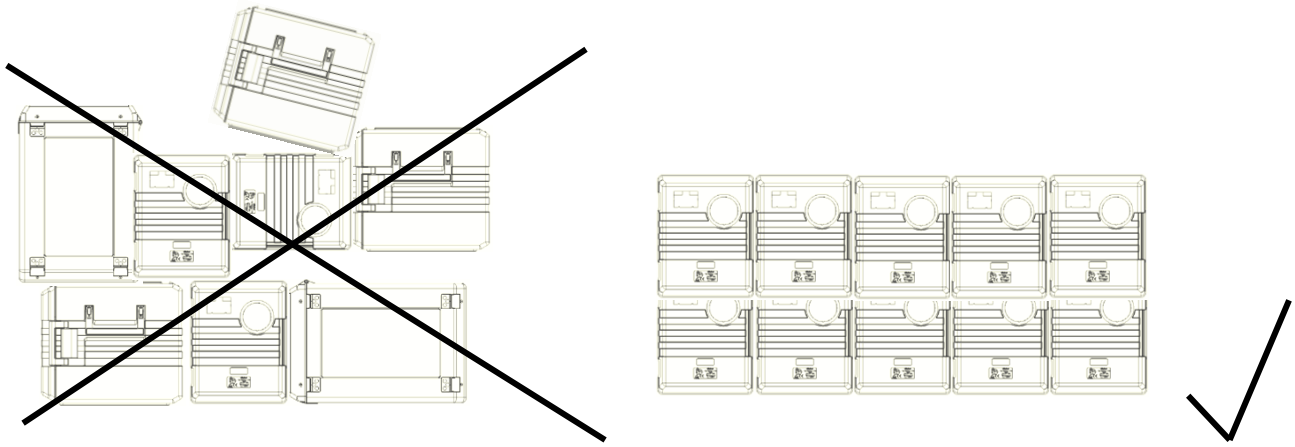
Chapter 'Information on accessories', page 45

7.10 Clean the TP daily after use

- Disconnect appliance from the power.
- Clean the appliance daily after use.

'Cleaning, maintenance and care', page 62 ff.

7.11 Stacking /storage of the TP



⚠ Risk of tipping when stacking

- Only stack with closed lid. Make sure that the stacking runners of the upper food transport container are located in the guides of the lower food transport container.
- Only stack matching TPs. The plastic and stainless steel versions of the **Rieber thermoport**® can be combined together for stacking.

- Store the empty food transport containers in a clean, dry area.
- **ATTENTION**
  Store appliance at room temperature.
  Please remember: In all areas of the electrical installation condensation may form on highly sealed housings which are exposed to temperature changes and therefore differences in air pressure between the inside and outside, despite high IP protection classes.
  Consequently there is a risk of corrosion, electrical short-circuits and other damage. These often lead to power failures, supply bottlenecks and cost-intensive production downtimes.

7.12 Note on permissible changes /modifications

 # The front door is exchangeable

The door can be easily exchanged.

Example

TP 1600 DU heatable

TP 1600 U

TP 1600

 # Would you like to retrofit CHECK HACCP ?

CHECK HACCP can be retrofitted at any time.

➢ Please contact Rieber customer service.

 # Would you like a different circulating air heater?

The ‘self-regulating circulating air heater’ and ‘adjustable circulating air heater' ’re exchangeable.

Page 22

 # Would you like to equip the TP 6000, TP 1000 with rustproof castors?

Mobile lower frame is bolted onto the underside of the TP, permanently mounted

TP 6000 KB
TP 6000 K

Order no.: 88 14 01 04

TP 1000 KB
TP 1000 K

Order no.: 88 14 01 05

2

See ‘Information on accessories ’, page 45

8 Cleaning, maintenance and care

This chapter will help you to meet the hygiene requirements. Before reading this section, please read through the "General safety instructions" section thoroughly first.

8.1 Safety information relating to cleaning, maintenance and care

⚠ Prevent risks due to electricity

⚠ Danger of electric shock. Risk of death.

- Always disconnect the mains connection before cleaning, by removing the connector plug from the main power supply.
- Before cleaning the **heatable TP**, remove the removable heating unit.
- Before cleaning the **actively cooled TP**, remove the circulation fan.
- Do not use a steam cleaning unit to clean electrical parts such as heating unit, circulation fan, ON/OFF switch etc.. Doing so may allow moisture to get into the electrical system and cause a short circuit. Do not expose to spray water. **Only wipe electrical parts with a damp cloth** and **rub dry with a dry cloth**.
- [3]) Have electrical equipment inspected by a **qualified electrician** in accordance with DGUV. Define the inspection cycle according to the conditions of use. Generally this is every 12 months.

⚠ Risk of burns, scalds and slipping

⚠ Risk of burns

Risk of burns to hands and arms on the hot heating unit, which can be up to 100 °C, and hot parts inside the TP.

Risk of scalds, for example when emptying hot water from the TP.
→ Relates to TP 105 L, TP 100 KB, TP 100 KB-CNS, TP 50 KB

- Allow the device to cool down.
- Drain hot water through a floor drain.
- Wear personal protective equipment, i.e. protective gloves and safety shoes.

- ⚠ **Slipping hazard.** Risk of falling
  Watch out for condensation water running off the 'actively cooled TP'.
- ⚠ **Service of refrigeration units with refrigerant R290**
  Cooling units with R290 refrigerant may only be repaired and serviced by companies commissioned by the manufacturer or by Rieber.

[3] Source: DGUV Regulation 3. Electrical Systems and Equipment

8.2 Cleaning agents for stainless steel

 # The following applies for all cleaning agents:

➢ Observe the instructions for use provided by the cleaning agent manufacturer.

 # Mechanical cleaners for stainless steel

Cleaning agent	Suitable
Brush products	Brushes with natural or synthetic bristles
Textiles	Textile material comprising natural and chemical cleaning fibres and textile fabrics (knitted and woven fabric, cleaning cloths, floor cloth, fringed material, fleece). Microfibre cleaning textiles are ideal for removing finger marks from stainless steel surfaces.
Synthetic fleece	Without abrasives. Mainly produced in the colours white, beige, yellow.
Other	Natural leather (chamois), synthetic leather, synthetic fleece, sponges, sponge cloths

 # Chemical cleaners for stainless steel

Cleaning agent	Areas of application
All-purpose cleaners	Particularly for lighter grease stains.
Neutral cleaners	For surfaces soiled with grease and oil (fingerprints); also suitable as a dishwashing detergent.
Alcohol cleaners	As all-purpose cleaner
Alkaline cleaners	Especially for heavy grease and oil stains (dried-in oils). Observe the manufacturer's dosage instructions.
Solvent cleaners	Depending on the type, particularly good for the removal of grease, oil, wax, tar, adhesives, paints and lacquers. Not suitable for plastics.
Disinfectant cleaners	Effect on pathogenic germs differs depending on active disinfectant ingredient. Long-term exposure to sodium hypochlorite can cause damage to the material. It should not be used if possible. Products should be used, which are specified in the list of the German Society of Hygiene and Microbiology (DHGM).

8.3 Choose the correct cleaning method

ATTENTION

Incorrect cleaning can damage the surface or even destroy the appliance. Please note:

- Do not scratch the surface with sharp-edged objects. Do not use any abrasive or aggressive cleaning agents, such as oven spray or a sponge with an abrasive surface.
- Remove dirt with cleaning and care products that are suitable for stainless steel.
- Do not mix standard cleaning agents; do not produce your own cleaning agent.
- Do not use steel wool or steel brushes.
- Avoid extended exposure of stainless steel to liquid containing salt, as this can lead to surface discolouration and corrosion.
- Avoid direct, extended contact of stainless steel with corroding iron parts, e.g. cast iron pans or steel kitchen sponges.

 # Clean and service stainless steel parts

→ Relates to the stainless steel housing of the TP

ATTENTION

Incorrect cleaning can cause damage to the surface.

- Do not clean stainless steel TP housing in the dishwasher.
- Clean the housing with a **mild washing up detergent diluted in hot water , wiping it with a** damp, scratch-free **cloth**. Then remove the cleaning residues with a well rinsed-out cloth.

- After cleaning, rub surfaces dry with a soft cloth. The cloth should be well rinsed out beforehand.

User tip

- We recommend **Rieber cleaning agent for stainless steel** for cleaning stainless steel.

  It is an especially thorough yet gentle cleaner, produces a dazzling shine, and cleans and protects in one.
  Order no.: 72 10 24 08

 # Cleaning and care of plastic TP and plastic parts

→ Relates to the plastic housing of the TP the castors, operator's controls such as switches and control unit, door seal

ATTENTION

Improper cleaning can damage the surfaces of the device.

- Avoid using a high-pressure cleaner if the operating temperature exceeds +130 °C. Keep an adequate distance.
- Clean the housing with a **mild washing up detergent diluted in hot water , wiping it with a** damp, scratch-free **cloth**. Then remove the cleaning residues with a well rinsed cloth.

- After cleaning, rub surfaces dry with a soft cloth. The cloth should be well rinsed out beforehand.

User tip

- For cleaning a plastic TP in the dishwasher, we recommend cleaning agent ETOLIT 3000 and 8000**.**

 # Clean seal of door/lid

→ Applies to: Stainless steel TP

ATTENTION

Incorrect cleaning can damage the seal of the door/lid.

- Do not clean with a high-pressure cleaner. Do not clean in the dishwasher.
- Clean the housing with a **mild washing up detergent diluted in hot water , wiping it with a** damp, scratch-free **cloth**. Then remove the cleaning residues with a well rinsed cloth.

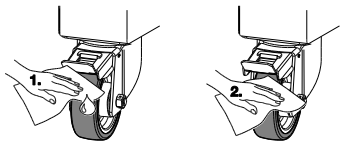
- After cleaning, rub surfaces dry with a soft cloth. The cloth should be well rinsed out beforehand.
- Remove the seal for cleaning if necessary.

 # Clean castors

ATTENTION

Cleaning the castors incorrectly can damage them.

- Do not clean with a high-pressure cleaner.
- Clean the housing with a **mild washing up detergent diluted in hot water , wiping it with a** damp, scratch-free cloth. Then remove the cleaning residues with a well rinsed cloth.



8.4 Overview of intervals

Interval	Activity to be performed	Page
Daily after use	Unplug the mains plug. Open the door/lid.	
	Allow the TP with heating to cool down.	
	⚠ Watch out for condensation running off the TP for keeping food cold. Slipping hazard.	
	⚠ Check the appliance and connection cable for any damage. A damaged mains cable must be replaced by a qualified electrician.	
	Choose the correct cleaning method	*Page 63 et seqq.*
	Dismount the removable heating unit on the heatable TP. Reinstall the heating unit after cleaning.	*Page 67*
	Remove the circulation fan on the actively cooled TP (made of stainless steel). Reinstall the circulation fan after cleaning.	*Page 69*
	Remove the refrigeration unit on the actively cooled TP (made of plastic). Reinstall the refrigeration unit after cleaning.	*Page 70*
	Clean the carcass of the TP	*Page 64*
	Clean the seal → Applies to stainless steel TP	*Page 72*
If required	Clean castors	*Page 64*
	Remove fluff, clean ventilation grille. At least 1x monthly.	*Page 69* *Page 70* *Page 71*
Every 180 working days or 6 months	Have electrical system /control checked	*Page 62*
	Inspect condition of product identification	*Page 16*

8.5 Heatable TP

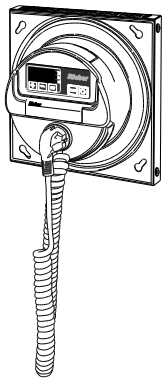
8.5.1 Disassembly and installation of the heating unit

- ⚠ **Danger of electric shock. Risk of death**
  Before cleaning the heatable TP, remove the removable heating unit. Wipe electrical parts **with a slightly damp cloth** and use a dry cloth **to rub dry**.

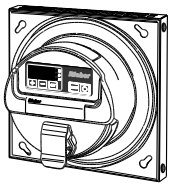
- ⚠ **Risk of burns**
  Wear personal protective equipment and protective gloves to prevent burns on the hot heating unit, which can be up to 100 °C.

 # Circulating air heater with bayonet fitting

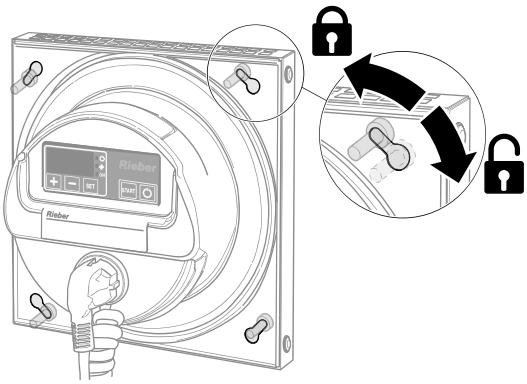
The circulating air heaters with bayonet fitting are unmistakable thanks to the arrangement of the keyholes.

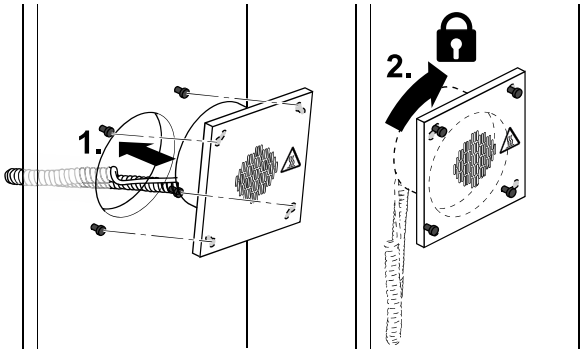


In the stainless steel version of the **thermoport**® the electrical connection cable is stored in the dummy connector.



In the plastic version of the **thermoport**® the electrical connection cable is connected separately.





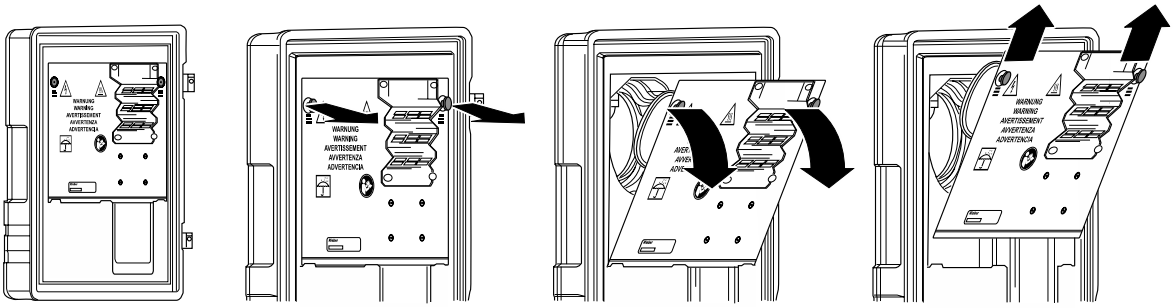
- **Disassembly:** Open the door. Rotate the heating unit by around 10 degrees from the inside of the door and remove it.
- **Installation:** Open the door. Push the connection cable through from the inside of the door. Install the heating unit.

 # Circulating air heater with click fitting

→ Relates to TP 6000 KB, TP 1000 KB, TP 600 KB

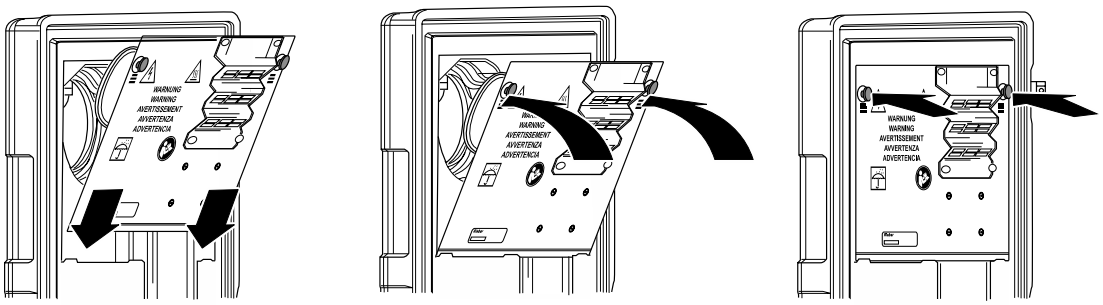
Thanks to the spring-actuated click lock, the heating can be installed/uninstalled easily.

Disas-sembly



➢ Pull on the click fitting to loosen the connection, tilt the heating unit and remove it.

Installation



➢ Place the heating unit in the mounting recess. Swivel the heating unit into the recess in the door and press, until the fixing buttons audibly engage.

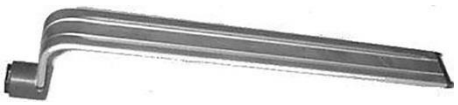
 # Rod heating

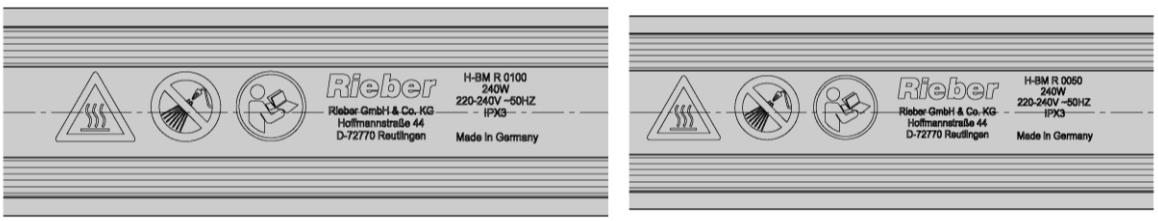
→ Relates to TP 100 KB heatable, TP 50 KB heatable

ATTENTION

The heating rod and the seal on the container can be damaged by incorrect handling.

➢ Remove and reinstall the heating rod step by step using light rotary movements, do not lever.





8.5.2 Keep the heating unit clean

→ Applies to: Heatable TP with circulating air heater, heatable TP with rod heater

➢ ⚠ **WARNING**
Wipe the heating unit with a **slightly damp cloth** and **rub dry** with a non-scratch **cloth**.

➢ Remove aspirated dust from the fan of the circulating air heater using compressed air. Do not poke anything into the ventilation grille.

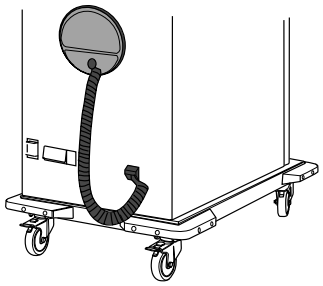
➢ ⚠ **WARNING**
Do not open the circulating air heater.

See 'Personnel qualification requirements', page 10

8.6 Actively cooled TP, (stainless steel)

8.6.1 Disassembly and installation of the circulation fan

→ Relates to actively cooled TP, hybrid actively cooled TP



➢ ⚠ **WARNING**
Danger of electric shock. Risk of injury due to rotating fan wheel.
Before cleaning the actively cooled TP, disconnect the appliance from the power and remove the circulation fan. Wipe electrical parts **with a slightly damp cloth** and use a dry **cloth to rub dry.**

➢ **Disassembly:** Open the door. Rotate the cooling air fan by around 10 degrees from the inside of the door and remove it. Loosen the position with the slider.

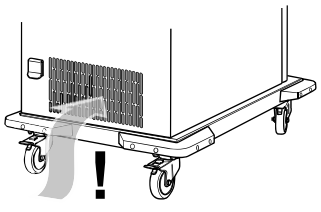
➢ **Installation:** Open the door. Push the connection cable through from the inside of the door. Install the cooling air fan. Make sure that it is mounted in all 4 bolts. Secure the position with the slider.

8.6.2 Keep the ventilation grille clean

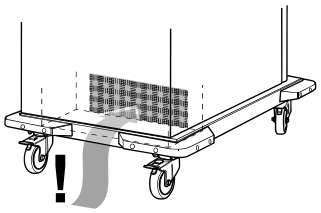
⚠ Risk of fire

Fluff in the ventilation area can cause a build-up of heat which could result in a fire.

- ➢ Clean the ventilation grille at refrigerating engine compartment using a cloth, paintbrush or vacuum cleaner.
- ➢ Adapt the cleaning cycle to the local requirements. Clean at least once a month.



Air outlet

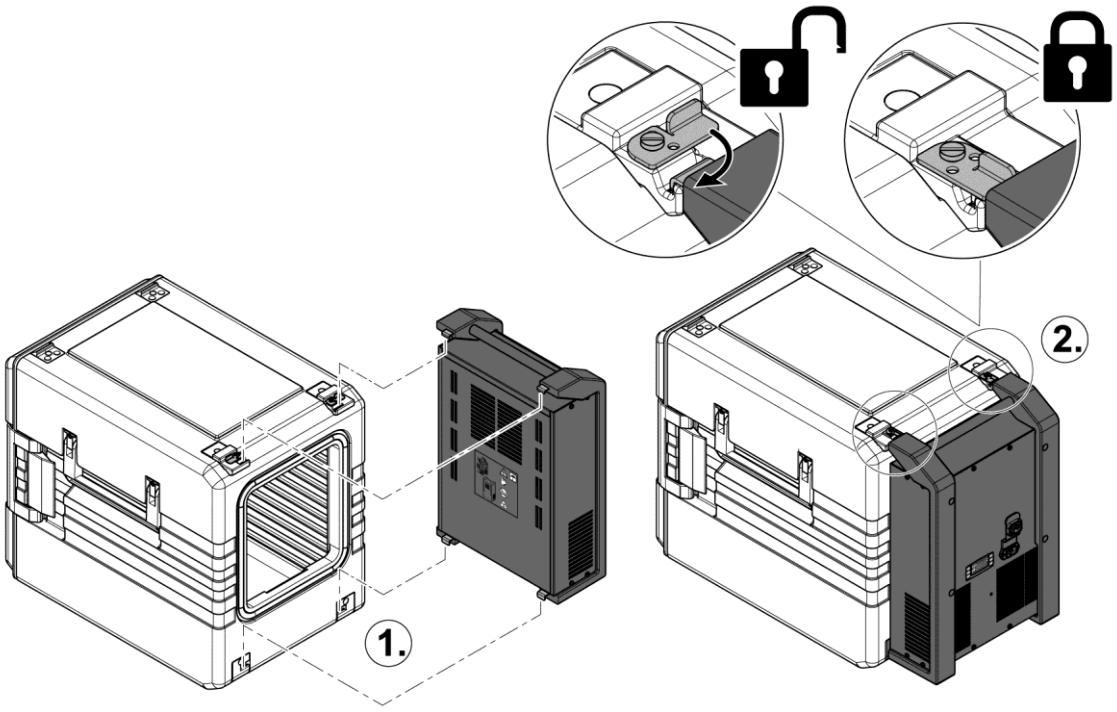


Suction opening

8.7 TP actively cooled, (made of plastic)

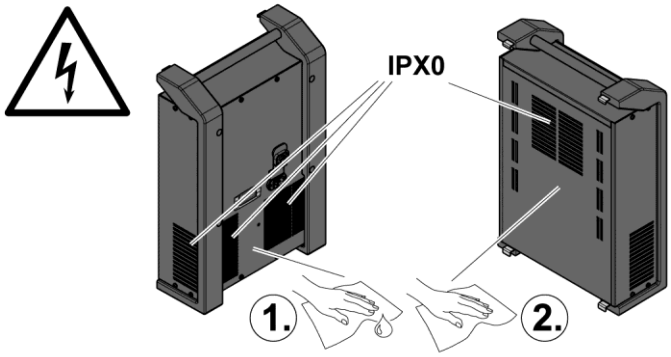
8.7.1 Disassembly and installation of the refrigeration unit

→ Applies to TP 1000 K cool, (made of plastic)



- ➢ **⚠ WARNING**

  Danger of electric shock. Risk of injury due to rotating fan wheel. Before cleaning the actively cooled TP, disconnect the appliance from the power and remove the refrigeration unit with circulation fan. Wipe electrical parts **with a slightly damp cloth** and use a dry **cloth to rub dry.**



NOTE

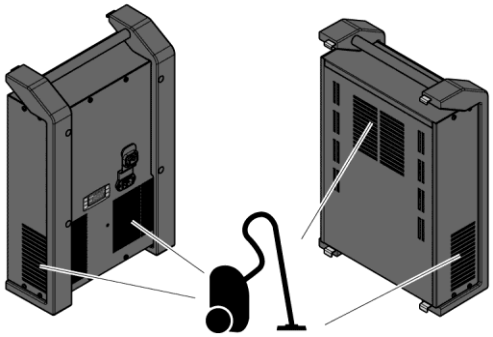
The cooling function may not work or may be impaired if the refrigeration unit is in an inclined position.

- Only use the appliance in the vertically upright position.

- If the refrigeration unit has been tilted: After a cooling circuit malfunction the refrigerant must accumulate first of all. Allow the appliance to stand undisturbed for at least two hours, in a vertical position and electrically switched off. Do not turn on electrically until then. Check the cooling function.

- **Disassembly:** Turn both catches 90 degrees, take hold of the handle and remove the refrigeration unit upwards. Loosen the position with the slider.
- **Installation:** …using the reverse procedure. Secure the position with the catches.

8.7.2 Ventilation grille clean



⚠ Risk of fire

Fluff in the ventilation area can cause a build-up of heat which could result in a fire.

- Clean the ventilation grille on the refrigeration unit a cloth, paintbrush or vacuum cleaner.
- Adapt the cleaning cycle to the local requirements. Clean at least once a month.

Plastic carcass and door

'Choose the correct cleaning method', page 64

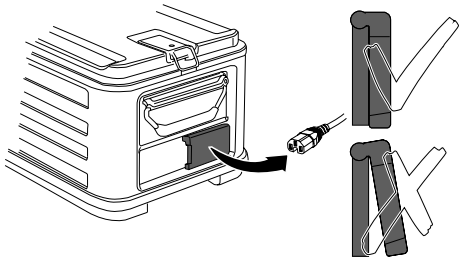
8.8 Notes on cleaning

⚠ Prerequisite

- TP de-energised. Mains plug unplugged
- Circulating air heater, rod heater removed
- Circulation fan of actively cooled TP removed
- Do not clean the TP with a high-pressure jet or in the dishwasher.

 # Procedure

➢ Make sure that the cover on the socket is fully closed.



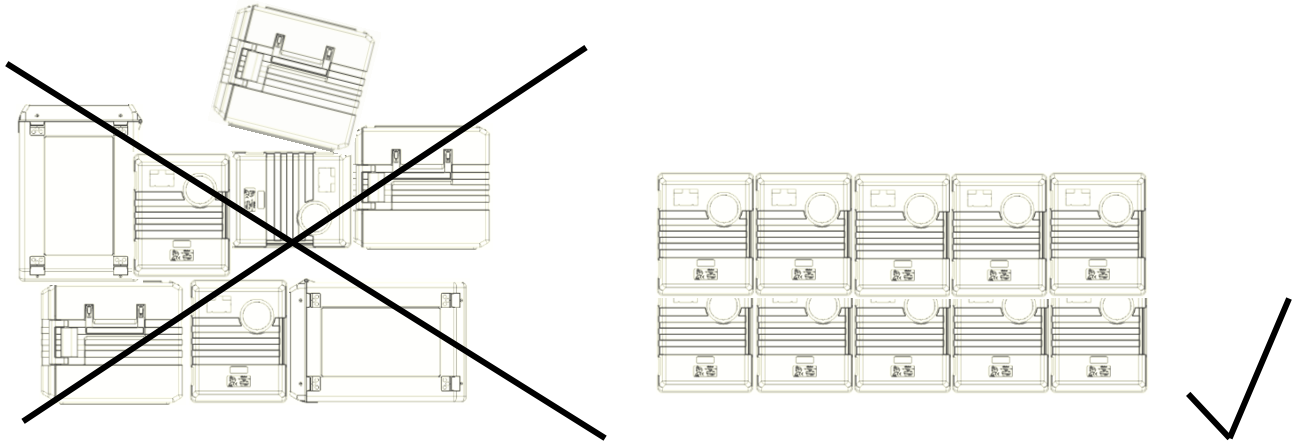
Example of TP 105 L, (made of stainless steel)

➢ **ATTENTION**
Clean the TP with a **mild washing up detergent diluted** in **hot water**, wiping it with a **damp**, **non-scratch cloth**. After cleaning, rub surfaces dry with a soft cloth.

➢ After cleaning, rub surfaces dry with a soft cloth. The cloth should be well rinsed out beforehand.

➢ Dry the inside of the appliance and leave the lid open until the residual moisture has dried off.

8.9 Note on storage



Risk of tipping when stacking

- Only stack with closed lid. Make sure that the stacking runners of the upper food transport container are located in the guides of the lower food transport container.
- Only stack matching TPs. The plastic and stainless steel versions of the **Rieber thermoport**® can be combined together for stacking.

- Store the empty food transport containers in a clean, dry area.
- **ATTENTION**
  Store appliance at room temperature.
  Please remember: In all areas of the electrical installation condensation may form on highly sealed housings which are exposed to temperature changes and therefore differences in air pressure between the inside and outside, despite high IP protection classes.
  Consequently there is a risk of corrosion, electrical short-circuits and other damage. These often lead to power failures, supply bottlenecks and cost-intensive production downtimes.

8.10 Keep ready for next use in dry condition

- Dry the inside of the appliance and leave the door / lid open until the residual moisture has dried off.

9 Operating faults/service

⚠ Danger of electric shock. Risk of death

- ➢ Before carrying out repairs on the appliance, disconnect it from the power. Do this by unplugging the electrical power plug.
- ➢ Have all electrical repairs carried out by an authorised electrician.

Any repairs during warranty period may only be carried out by the Rieber service department. Please contact the Rieber service department.

Only spare parts that have been approved and specified by the manufacturer may be used. Certain repairs may only be carried out by the Rieber service department.

Work on the cooling unit should only be carried out by authorised skilled personnel like a refrigeration specialist or a member of the Rieber Customer Service.

Fault	Possible cause	Rectification
Circulating air heater soiled	Food and liquids have not been transported in closed containers. The TP may have fallen.	➢ Repair # Rieber Service or authorized partner # Appropriately trained and authorised operating personnel *Page 10*
Heating not working	Heating defective	➢ Repair # Rieber Service or authorized partner
Controller not working	Controller defective	➢ Repair # Rieber Service or authorized partner
Insufficient cooling	Wrong target temperature setting	➢ Check # Operating staff
	Food not pre-chilled sufficiently	➢ Check # Operating staff
	Not enough coolant in appliance	➢ Repair # Refrigeration expert
Castor defective	Wear, damage	➢ Replace # Specialist for mechanic´s work

 # Customer service, spare parts

Visit us on the Internet at http://www.rieber.de

IMPORTANT

Customer service needs information about the type and number of your appliance.

➢ If you have a fault you cannot remedy yourself, please get in touch with your Rieber partner or Rieber central customer service.

 # Disposing of your product

Your appliance is made of high-quality material which can be reused / recycled. For disposal, disconnect the appliance from mains supply. Unplug the mains plug. Cut off the cable directly at the casing. Dispose of this appliance properly via your local disposal facility.

Risk of suffocation

Persons with limited sensory and mental ability might get locked in.

➢ When disposing of the unit, destroy the door lock.

10 Warranty and liability

Manufacturer liability and warranty shall no longer apply if

- you do not follow the information and instructions in this user guide,
- do not use the device as it is intended,

  See chapter "Intended use"

- make conversions or functional modifications,
- do not use original spare parts.

The "Sales and delivery terms and conditions" of Rieber GmbH & Co. KG shall apply for all warranty claims made against the manufacturer. For instance, any repairs and/or overhaul during the warranty period may only be performed by the Rieber service department, failing which any resulting claims may be voided. Please contact the Rieber service department.

NOTE: If the product identification is damaged or illegible, the warranty will be invalidated. Contact Rieber Service as early as possible in the event of damage.

The following wear parts are not included in the warranty:

- Caster, caster with parking brake, corner bumper, stacking lock, stacking runner

11 Excerpt from EU Declarations of Conformity

EC Declaration of Conformity according to EC Machinery Directive 2006/42/EC

Rieber GmbH & Co. KG hereby declares that the products

- thermoport® with circulating air heater
- thermoport® actively cooled

complies with the basic requirements of the EC Machinery Directive 2006/42/EC, Appendix II A, harmonised standards (DIN EN ISO 12100: Safety of Machinery — General principles for design — Risk assessment and risk minimisation).

EU Declaration of Conformity
in accordance with European Directive 2014/35/EU (Low Voltage Directive)

Rieber GmbH & Co. KG hereby declares that the products

- thermoport® heatable, statically heated

comply with the basic requirements of the European Directive 2014/35/EU.

EU Declaration of Conformity
in accordance with the European Directive on Electromagnetic Compatibility 2014/30/EU.

Rieber GmbH & Co. KG hereby declares that the products

- thermoport® with circulating air heater
- thermoport® actively cooled
- thermoport® heatable, statically heated

comply with the basic requirements of the European Directive 2014/30/EU.

The appliance complies with EC Regulation no. 1935/2004 dated 27/10/2004, relating to materials and articles intended to come into contact with foodstuffs.

If required, a copy of the EC Declaration of Conformity can be obtained from our sales team.

12 Manufacturer's address

Rieber GmbH & Co. KG
Hoffmannstraße 44
D72770 Reutlingen, Germany
Phone +49 (0) 7121 518-0
FAX +49 (0) 7121 518-302
Email info@rieber.de
www.rieber.de