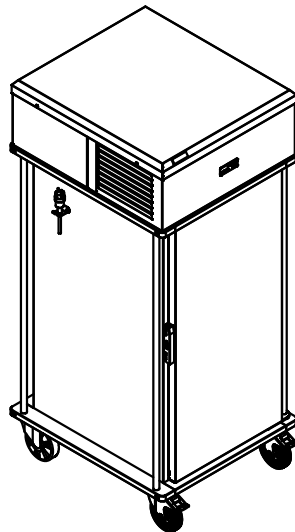


Operating Instructions



HUPFER® Köhler® Banquet Trolley Cooled

1 Introduction

1.1 Appliance Information

Appliance name	HUPFER® Köhler® Banquet Trolley Cooled
Appliance type/s	Fehler! Kein Text mit angegebener Formatvorlage im Dokument.
Manufacturer	HUPFER® Metallwerke GmbH & Co. KG Dieselstraße 20 48653 Coesfeld Germany Postfach 1463 48634 Coesfeld Germany  +49 2541 80 50  +49 2541 805 111 www.hupfer.de info@hupfer.de

Read these operating instructions thoroughly and attentively to ensure safe operation and avoid any damage!

Ensure that operating staff have been briefed regarding sources of danger and possible incorrect handling.

Subject to modifications

The products covered by these operating instructions have been developed while taking into account market requirements and the latest technology. **HUPFER®** reserves the right to modify its products and associated technical documentation insofar as the modifications are in the name of technological progress. The data and weights as well as the description of performance and functions assured in the order confirmation as binding are always decisive.

Translation of the original edition

Manual edition
91149322_A3

1.2 Table of Contents

1	Introduction	2
1.1	Appliance Information	2
1.2	Table of Contents	3
1.3	List of Abbreviations	5
1.4	Definitions of Terms	6
1.5	Orientation of the Appliance	7
1.6	Notes on Using the Manual	8
1.6.1	Notes on the Manual Structure	8
1.6.2	Notes and their Representation used in all Sections	8
2	Safety Instructions	9
2.1	Introduction	9
2.2	Warning Symbols Used	9
2.3	Safety Instructions for Appliance Safety	10
2.4	Safety Instructions for Transport	11
2.5	Safety Instructions for Cleaning and Care	11
2.6	Safety Instructions Regarding Fault Repair	11
2.7	Notes on Specific Hazards	11
3	Description and Technical Data	12
3.1	Performance Description	12
3.2	Intended Use	12
3.3	Improper Use	12
3.4	Appliance Description	13
3.5	Technical Data	14
3.6	Rating Plate	15
4	Transport, Initial Operation and Taking out of Service	16
4.1	Transport	16
4.2	Commissioning	16
4.3	Storage and Recycling	17
5	Operation	18
5.1	Arrangement and Function of the Control Panel	18
5.2	Operation	19
5.3	Measures at the End of Use	20
6	Troubleshooting and Repair	21
6.1	Safety Measures	21
6.2	Instructions regarding Fault Repair	21
6.3	Fault and Action Table	21
7	Cleaning and Care	23
7.1	Safety Measures	23
7.2	Hygiene Measures	23
7.3	Cleaning and Care	23




7.3.1	Cleaning and Care Measures	24
7.4	Special Care Instructions	24
8	Spare Parts and Accessories	26
8.1	Safety Measures	26
8.2	Notes on Servicing	26
8.3	Spare Parts and Accessories List	26

1.3 List of Abbreviations

Abbreviation	Definition	
BGR	German Employers' Liability Insurance Association rule (<i>Berufsgenossenschaftliche Regel</i>)	
BGV	German Employers' Liability Insurance Association regulations (<i>Berufsgenossenschaftliche Vorschrift</i>)	
CE	Communauté Européene European Community	
DIN	German Institute for Standardisation, technical regulations and technical specifications	
EC	European Community European Community	
EN	European Standard (<i>Europäische Norm</i>) Harmonised standard for the EU market	
E/V	Spare or wearing part (<i>Ersatz- bzw. Verschleißteil</i>)	
HACCP	Hazard Analysis and Critical Control Points Hazard analysis of critical control points	
IP	International Protection. The abbreviation IP and a further two-digit index specify the protection class of a housing. The first digit: Protection against ingress of solid foreign objects The second digit: Protection against ingress of water	
	0 No protection against contact, no protection against ingress of solid foreign bodies	0 No protection against ingress of water
	1 Protection against contact with any large surface of the body such as the hand, protection against ingress of foreign objects $\varnothing > 1.97''$ (50 mm)	1 Protection against dripping water (vertically falling drops)
	2 Protection against contact with the fingers, protection against ingress of foreign objects $\varnothing > 0.5''$ (12 mm)	2 Protection against dripping water (at any angle up to 15° from the vertical)
	3 Protection against contact with tools, wires or similar objects of $\varnothing > 0.1''$ (2,5 mm), protection against foreign objects $\varnothing > 0.1''$ (2,5 mm)	3 Protection against water drips at any angle up to 60° from the vertical
	4 Protection against contact with tools, wires or similar objects of $\varnothing > 0.04''$ (1 mm), protection against foreign objects $\varnothing > 0.04''$ (1 mm)	4 Protection against water splashing from any direction
	5 Protection against contact, protection against dust deposits inside	5 Protection against water jets (projected by a nozzle) at any angle
	6 Complete protection against contact, protection against ingress of dust	6 Protection against rough sea or strong water jets (flood protection)
		7 Protection against ingress of water during temporary immersion
		8 Protection against pressurised water during continuous immersion
LED	Light Emitting Diode Light diode	
LMHV	Regulation on the hygiene of foodstuffs	
RCD	Residual Current Device Residual current device (RCD)	
STB	Safety temperature limiter	

1.4 Definitions of Terms

Term	Definition
Authorised specialist	An authorised specialist is a specialist that has been trained by the manufacturer, an authorised service dealer or a company assigned by the manufacturer.
Check, inspect	Compare with certain conditions and/or characteristics such as damage, leaks, filling levels and heat.
Cleaning system-resistant	<p>The suitability of the appliance for cleaning in an automated cleaning system is limited. It is possible to achieve a flawless, reproducible cleaning and drying result, but it cannot be guaranteed.</p> <p>The exterior and interior housing are produced to standard specifications. Water ingressing hollow spaces resulting from the design of the appliance can run off without hindrance. Water collection in hollow spaces is avoided. Installed electrical components and electrical wiring are protected by appropriate sealing (for example, labyrinth edges, sealing profiles, cable channels) against any form of penetration by water. Protection class IPX6 (powerful pressurised water) to DIN EN 60529 (VDE 0470) is guaranteed. It is possible that water remains and is carried over following the drying process.</p>
Convection	Physical properties or mass transfer (e.g. heat or cold) through currents in gases and liquids.
Cook&Chill Kitchens	"Cook and Chill": Kitchens where warm food is chilled as quickly as possible after being cooked.
Cook&Serve Kitchens	"Cook and Serve": Kitchens where warm food is served immediately after being cooked or kept warm until it is consumed.
Corrosion	The chemical reaction of a metallic material with its surroundings, e.g. rust.
Cover	A bell-shaped cover for keeping food warm on plates and dishes.
Element formation	Also: contact corrosion. Occurs when different noble metals are in close contact with each other. This happens when a corrosive medium is between both metals, such as water or even normal air moisture.
EM field	Electrical, magnetic or electromagnetic field that is defined by its field intensity and phase formation.
EN tray	A European standard tray is a tray in a standard size. EN 1/1 corresponds to 20.9x14.6" (530x370 mm), EN 1/2 corresponds to 14.6x10.4" (370x265 mm).
Gastronorm	Gastronorm is a measurement system used worldwide in places such as food processing plants or large-scale kitchens. The use of standardised sizes makes it possible to exchange food pans. The basic size of the Gastronorm (GN) 1/1 is 12.8 x 20.9" (530 x 325 mm). Items are available in different depths.
GN tray	A Gastronorm standard tray is a standard-size tray. GN 1/1 corresponds to 20.9x12.8" (530x325 mm), GN 1/2 corresponds to 12.8x10.4" (325x265 mm).
H1	Hygienic standard (NSF/USDA) for lubricants that are suitable for incidental and technically unavoidable contact with foodstuffs.
HACCP	The HACCP concept is a preventive system that should ensure the safety of foods and consumers.
Instructed person	An instructed person is a person who has been instructed on the possible risks resulting from improper behaviour when carrying out an assigned task and regarding the necessary protective equipment and protective measures, and who has been trained for this task, if necessary.
Lift	A movement, for example a vertical movement of the guide basket from bottom to top.
LMHV	German Regulations on the Hygiene of Foodstuffs Regulations regarding hygiene requirements for producing, handling and placing food on the market
Machine safety	The term machine safety refers to all the measures used to avert injury to persons. The basis for machine safety is directives and laws for protecting users of technical devices and systems valid nationally and across the EC.
Passive layer	A non-metallic protective layer on a metallic material that prevents or slows down material corrosion.

Term	Definition
Porcelain-Standard	Porcelain-Standard is a measurement system for porcelain plates drafted by HUPFER®. The basic size of Porcelain-Standard (PN) 1/1 is 8.7x6.3" (220x160mm) (1/2 PN conforms to 4.3x6.3" (110x160mm), 1/4 PN conforms to 6.3x3.1" (160x80 mm)). The fitting lids have the following dimensions: 1/1 PN 9x6.6" (228x168mm), 1/2 PN 4.4x6.3" (111x161mm), 1/4 PN 4.4x3.2" (111x81mm).
Protection class	<p>0 —</p> <p>I </p> <p>II </p> <p>III </p>
Qualified person, qualified personnel	Qualified personnel are persons who due to their professional training, experience, instruction and their knowledge of relevant standards, guidelines, accident prevention regulations and operating conditions have been authorised by a person responsible for system safety to carry out required activities and can recognise and prevent any potential hazards (definition of specialists according to IEC 364).
Schuko®	The abbreviation of the German term "Protective contact" indicates a system of domestic plugs and sockets equipped with protective earthed contacts used in most of Europe.
Specialist	A specialist is a person who can assess work assigned and can recognise possible hazards themselves based on their professional training, skills, experience and knowledge of the respective guidelines.
Suitable for washing devices	<p>The appliance is suitable for cleaning in an automated cleaning system without restrictions. Following agreement with the manufacturer the cleaning system must achieve a hygienic, constant cleaning and drying result, which is to be approved by a third party (client).</p> <p>The exterior and interior housing are manufactured to a standard guaranteeing hermetic sealing. It is not possible for water jets to ingress into hollow spaces in the appliance. Installed electrical components and electrical wiring are protected by appropriate sealing against any form of penetration by water. Protection class IPX6 (powerful pressurised water) to DIN EN 60529 (VDE 0470) is guaranteed. No water remains or is carried over following the drying process.</p>
Verify, test	Compare with certain values such as weight, torque, content or temperature.
VESKA standard	Trays as per the VESKA standard are items used for distributing food in hospitals, principally in Switzerland; they measure 20.8 x 14.7" (530x375 mm).

1.5 Orientation of the Appliance

The front

The front refers to the side where the door and controls are arranged and at which the staff loads the appliance.

The rear

The rear refers to the opposite side to the front.

The right

The right refers to the right hand side when viewed from the front side (front).

The left

The left refers to the left hand side when viewed from the front side (front).




1.6 Notes on Using the Manual

1.6.1 Notes on the Manual Structure

This manual is divided into function- and task-focused sections.

1.6.2 Notes and their Representation used in all Sections

The warnings and notes are separated from the other text and are particularly marked by corresponding icons. The icon cannot, however, replace the text of the safety instructions. Therefore, always read thoroughly the full text of the safety instructions. The warnings and notes are separated in these operating instructions as follows and categorised by the following danger levels by means of various symbols.

DANGER	Brief description of hazard
	<p>There is an imminent threat to life and physical well-being for the user and / or third parties if instructions are not followed precisely or the circumstances described are not taken into account.</p> <p>The type of hazard is indicated by a symbol and explained in the accompanying text in more detail. The general symbol for danger is used in this example.</p>
WARNING	Brief description of hazard
	<p>There is an indirect threat to life and physical well-being for the user and / or third parties if the instructions are not followed precisely or the circumstances described are not taken into account.</p> <p>The type of hazard is indicated by a symbol and explained in the accompanying text in more detail. The general symbol for danger is used in this example.</p>
CAUTION	Brief description of hazard
	<p>There is a potential risk of injury or property damage if the instructions are not followed precisely or the circumstances described are not taken into account.</p> <p>The type of hazard is indicated by a general symbol and explained in the accompanying text in more detail. The general symbol for danger is used in this example.</p>
NOTE	Brief description of additional information
	Attention is pointed to special conditions or additional important information on the topic concerned.
INFO	Short title
	It contains additional information on work ease or recommendations on the topic concerned.

2 Safety Instructions

2.1 Introduction

The Safety Instructions section describes the risks associated with the appliance in terms of product liability (according to the EU Machinery Directive).

The safety instructions are meant to warn of hazards and help to avoid damage to persons, the environment and property. Please make sure that you have read and understood all the safety instructions given in this section.

The valid national and international Safety at Work Regulations must be complied with. The manufacturer is responsible for the valid regulations he/she has to provide. He/she must acquaint himself/herself and the operator with the new regulations.

In addition to these operating instructions, comply with the Health and Safety rules of the German Federation of the Statutory Accident Insurance Institutions for the Industrial Sector, especially with those that concern the handling of hot items and risks involved (BGR 110 "Protection of health and safety at work in restaurants" and BGR 111 "Protection of health and safety at work in large-scale kitchens").

2.2 Warning Symbols Used

Symbols are used in these operating instructions to indicate the dangers that may occur while operating or cleaning the appliance. In both cases, the symbol provides information on the type and circumstances of hazards.

The following symbols may be used:

	General hazard area
	Hazardous electrical voltage
	Risk of hand injuries
	Risk of crushing
	Spraying with water forbidden
	Wear hand protection

2.3 Safety Instructions for Appliance Safety

The appliance is operated safely if it is used correctly and carefully. Negligent handling of the appliance can lead to a threat to life and physical well-being for the user and / or third parties as well as hazards for the appliance itself and the operator's other property.

The following points are to be observed to ensure the appliance safety:

- The appliance may only be operated as intended, when it is in perfect condition with regards to technical standards, with awareness of safety and hazards and in accordance with the operating instructions.
- All operating and actuating elements must be in a perfect and fail-safe condition with regards to technical standards.
- Before putting the appliance into operation, the appliance must be checked for external visible damage and defects. In case of damage, inform immediately the competent bodies and switch off the banquet trolley.
- Modifications or retrofits to the equipment are only permitted after consultation with the manufacturer and upon receipt of their consent in writing.
- The appliance is designed for transport by hand only. It is not permitted to use a machine of any type to move the appliance. Risk of injury and damage.
- Release both total brakes before moving the appliance. Moving the appliance when the total brakes are engaged can damage the chassis.
- Only transport the appliance over level floors and on a maximum slope of 10 % (4.5°). Moving the appliance over very uneven floors and stair steps can damage the chassis.
- Do not stop the banquet trolley by applying the total brakes. The total brakes are designed to be able to prevent the appliance from unintended moving. Do not park the appliance on sloping floors. Secure the appliance against rolling away by applying both total brakes when stopping it.
- When approaching walls and moving round obstacles, always be aware for persons in your path. Risk of injury.
- When transporting the appliance, always hold push bars with both hands. Never let go the appliance while moving it.
- Do not move faster than at walking pace when transporting the appliance. Heavily laden banquet trolleys are difficult to brake and steer. If necessary, ask for assistance when transporting the appliance.
- Never try to catch the banquet trolley with your hands if it tips over due to carelessness or external circumstances. Risk of injury.
- The appliances have to be safely secured when transported off site inside a vehicle such as a truck. The total brakes are not suitable for securing the appliances when they are transported in a vehicle.
- Before transporting, switch off the appliance, pull out the mains plug and insert it into the holder provided.
- Never use the connecting lead to pull the mains plug out of the socket.
- Never move the appliance by pulling on the connecting lead.
- If the mains plug has come into contact with water, it must be dried before it is inserted into the socket. Danger to life.
- Damaged mains plugs or connecting leads are to be replaced by authorised personnel before the appliance is used again.
- Do not use extension leads in wet and damp areas.

2.4 Safety Instructions for Transport

The following points are to be observed when transporting the banquet trolley:

- When loading, use only hoists and load lifting devices approved for appliances 1,5 times heavier than the appliance to be lifted.
- Use transport vehicles that are approved for the weight of the banquet trolley.
- In accordance with the legal regulations the buyer bears the risk of transportation. Ask the deliverer to write down visible damages in the waybill.
- Do not put a defective appliance into operation under any circumstances and inform the supplier immediately in such a case.

2.5 Safety Instructions for Cleaning and Care

The following aspects must be taken into account when performing any cleaning and care tasks:

- Take the banquet trolley out of operation, switch it off and secure against unauthorised reactivation before performing cleaning and care measures.
- Cleaning instructions must be strictly observed for reasons of hygiene.
- The appliance should not be cleaned with running water, or steam-jet or high-pressure cleaners. The appliance must be taken out of operation and switched off at the mains beforehand in any area where high-pressure steam or pressure washers are to be used. Do not spray the appliance and especially the electrical housings with water or cleaning agents while cleaning.

2.6 Safety Instructions Regarding Fault Repair

The following aspects must be taken into account when carrying out any troubleshooting work:

- The local Accident Prevention Regulations in force must be observed.
- Take the banquet trolley out of operation, switch it off and secure against unauthorised reactivation before performing maintaining or troubleshooting operations. The appliance must be switched off at the mains and secured against reactivation when working on the electrical system.
- Observe the valid product safety regulations for the product when handling oils, greases and other chemical substances.
- Wear suitable protective clothing when carrying out any maintenance and repair work.
- Carry out all the checks and inspections of the appliance on a regular basis. Remove immediately deficiencies, such as loose screw connections, melted or damaged leads.
- Only authorised specialists may repair any faults or malfunctions.
- Defective components may be replaced with original parts only.

2.7 Notes on Specific Hazards

Electric power

- All work on the electrical installations may only be carried out by a qualified electrician or by authorised specialists under the supervision and monitoring of a qualified electrician according to the applicable electro-technical regulations.
- The appliances on which inspection, maintenance and fault repairs are performed must be disconnected from the power supply and secured against reactivation when power is not required for such work. This may only be carried out by a qualified electrician.

3 Description and Technical Data

3.1 Performance Description

Banquet trolleys are intended for hygienic and efficient transport of food in the food service industry and large-scale catering establishments. They hold up prepared food in Gastronorm containers or already portioned meals on grids and keep them chilled

3.2 Intended Use

Banquet trolleys are only intended to accommodate Gastronorm containers with prepared food or already portioned meals on the grids. They transport hygienically and efficiently prepared and portioned food ready for serving in the food service industry and large-scale catering establishments.

Intended use includes observing specified procedures, compliance with the technical specifications and use of supplied or optional original accessories.

Any other use of the appliance is considered as unintended use.

3.3 Improper Use

Any other use, especially loading the banquet trolley with other loads than those specified, is not permitted.

Transport of living beings, heavy and sharp-edged items, loose crockery items or stacks of crockery items is not permitted.

Banquet trolleys are not intended to be used as a seating surface or as a storing surface for items. In no case may people sit down or stand on or inside the appliance.

The manufacturer and suppliers are not liable for any consequential damage resulting from unintended use. No liability is assumed and no warranty claims can be submitted for damages caused by improper use.

3.4 Appliance Description

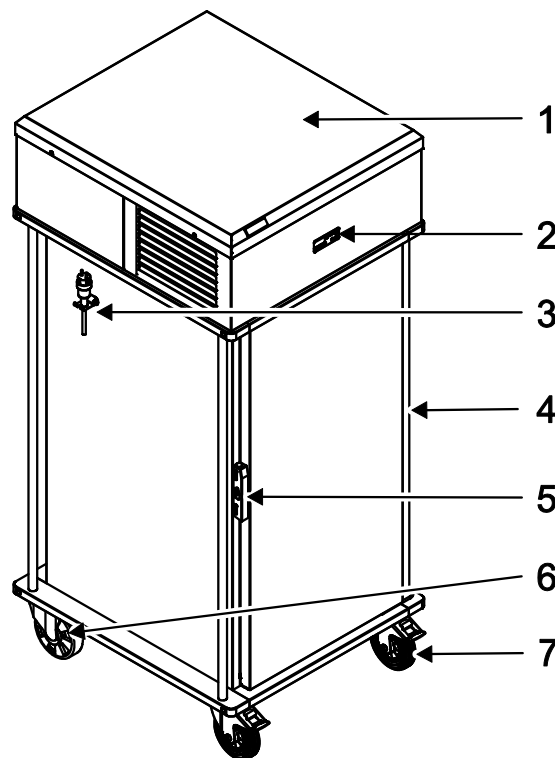


Figure 1 View of the appliance

- | | | | |
|---|-----------------------|---|--------------------------------|
| 1 | Cooling element | 5 | Door opener |
| 2 | Control | 6 | Fixed caster |
| 3 | Holder for mains plug | 7 | Swivel caster with total brake |
| 4 | Push bar | | |

The appliance is made of stainless steel and its surface is polished.

The banquet trolley is equipped with a door on the front side. The removable support ledge frames are fitted on the sides in the interior of the appliance to put the Gastronorm containers and/or grids.

The appliance is equipped with two fixed and two lockable swivel casters with total brakes. The banquet trolley is suitable for transport over carpets owing to a particular size of casters fitted with special tyres.

A cooling element keeps the required temperature of the banquet trolley BKW1/40 B-GN UK cooled with circulating air.

The refrigerant used in the cooling element is free of CFC. A convection cooling system is installed for a better distribution of cold air.

The operating temperature is set by means of a digital thermostat and is displayed on the temperature control indicator on the operating side of the appliance. The thermostat regulates automatically cooling of the interior and maintaining of the set temperature. The thermostat switches off the cooling as soon as the set temperature is reached. When the cooling is switched off, the control lamp is off. The circulating air blower runs independently of the cooling during the complete operation.

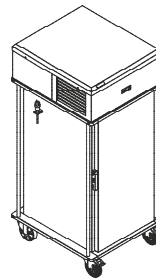
The interior of the trolley can be thoroughly and quickly cleaned with a soft cloth after the end of operation.

If it is intended to transport the banquet trolley frequently by lorry, a transport securing device available at [HUPFER®](#) can be used. This additional option must be indicated when ordering.

It is possible to fasten the appliance without causing any damages and transport it safely by lorry due to the safety holders and reinforced side panels of the banquet trolley.

3.5 Technical Data

	Dim.	BKW 1/40 B-GN UK
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Width	in (mm)	31.3" (795)
Depth	in (mm)	35.2" (895)
Height	in (mm)	73.8" (1873)
Tare weight	lbs (kg)	173
Payload	lbs (kg)	78.5 (178)
Capacity		20 x GN 2/1 40 x GN 1/1
Caster diameter	in (mm)	6.3" (160)
Temperature range in the interior	°F (°C)	35.6 to 50 (2 to 10)
Refrigerant		R134a
Amount of refrigerant	lbs (kg)	0.1 (0.21)
Operating and ambient conditions	°F (°C)	50 to 100.4 (+10 to +38)
Nominal current	A	2.12
Connected load	kW	0.285
Protection class		IPX4

You can find the corresponding certification marks on our homepage at www.hupfer.de.

3.6 Rating Plate

The rating plate is at the bottom right on the rear side of the banquet trolley.

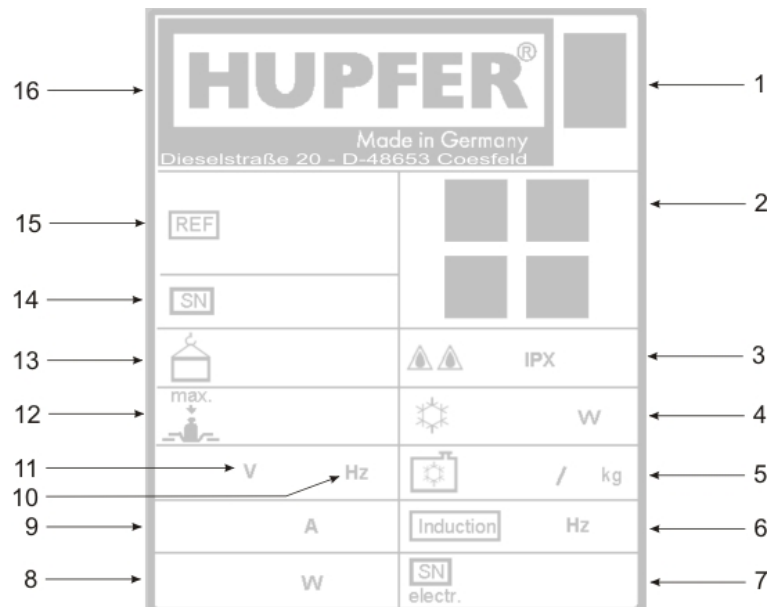




Figure 2 Rating plate

1	Disposal of old appliances	9	Nominal current
2	Certification mark	10	Frequency
3	Protection class	11	Nominal voltage
4	Refrigeration capacity	12	Payload
5	Refrigerant	13	Tare weight
6	Induction frequency	14	Serial number/Order number
7	Electrical serial number	15	Item and brief description
8	Electric power	16	Manufacturer

4 Transport, Initial Operation and Taking out of Service

4.1 Transport

CAUTION	Damage to appliances caused by improper transport
	<p>Appliances should be safely secured when transported off site inside a vehicle such as a truck. The total brakes are not suitable for securing the appliances when they are transported in a vehicle.</p> <p>If the appliances are not secured properly, there is a risk of property damage and personal damage caused by squashing.</p> <p>Secure each individual separate appliance using suitable transport securing devices. If possible, use the transport securing device available at HUPFER® to be able to fasten the banquet trolley in the lorry without causing any damage.</p>


CAUTION	Appliance damage
	<p>After transporting or storing the banquet trolley horizontally, keep it in a vertical position for some time to ensure that the coolant can flow back into its initial position.</p> <p>Wait at least for about 12 hours before you put the appliance into operation.</p>

The banquet trolley is delivered as an assembled unit, i.e. it is completely assembled including the cooling element.

When loading, use only hoists and load lifting devices approved for appliances 1.5 times heavier than the banquet trolley to be lifted. Only transport vehicles approved for the weight of the appliance may be used.

The scope of delivery is specified in the shipping documents in accordance with the valid purchase agreement and included with the delivery item.

4.2 Commissioning

DANGER	Hazardous electrical voltage
	<p>Electrical current can pose a considerable threat to life and physical well-being and may lead to injuries.</p> <p>Before putting the appliance into operation, check whether the mains voltage indicated on the rating plate (230V / 50/60 Hz) corresponds to the local mains voltage. If this is not the case, do not put the appliance into operation.</p> <p>Do not use any extension leads in wet areas.</p>

The banquet trolley, especially the safety equipment, must be checked for external visible damages and defects whenever it is put into operation. In case of damage, immediately inform the competent bodies and do not put the banquet trolley into operation.

Remove the original packaging and check whether the appliance is complete and undamaged.

Always place the banquet trolley on firm and level floors when unpacking and operating it. Apply the total brakes on both swivel casters to secure the appliance against rolling away.

INFO	Disposal of packing material
	<p>The packing consists of recyclable materials and can be disposed of accordingly. The different materials should be separated and disposed of in an environmentally friendly manner. The local agencies responsible for disposal must be contacted regarding removal</p>

The interior and exterior of the banquet trolley should be thoroughly cleaned with a soft cloth before putting it into operation for the first time.

Afterwards, it is necessary to check whether the appliance functions properly.

- Check the functioning of the total brakes, controls and cooling unit.
- Close the door.

Ensure that the appliance is clean and dry before putting it into operation.

4.3 Storage and Recycling

Appliances must be kept in a dry, frost-free environment when placed in temporary storage. The banquet trolley must be kept covered with a suitable covering material to be protected against dust ingress.

The appliance kept in the storage location must be checked for damage and corrosion every 6 months.

NOTE	Condensation
	Ensure that there is sufficient ventilation and no major variations in temperature in the storage location to prevent condensation from forming.

Before the appliance is taken back into operation, it must be clean and dry.

If the banquet trolley is to be recycled, all the operating and auxiliary materials must be disposed in an environmentally compatible manner. Recyclable materials must be properly separated and disposed of in an environmentally compatible manner in accordance with local Waste Disposal Regulations. The local agencies responsible for disposal must be contacted regarding removal. Separate the reusable materials of the appliance (casters and plastic parts) before disposing of or send the appliance to a recycling centre. Dispose of the electronics at corresponding collection centres.

We offer our customers to dispose of their waste appliances. Please contact us or one of our distribution partners.

Packaging and packing material can be sent to the recycling centre by indicating the waste disposal contract number. If you do not have the valid waste disposal contract number, you can request it from [HUPFER®](#) - Service.

5 Operation

CAUTION



Appliance damage

Fully loaded banquet trolleys on very uneven floors and steep slopes can lose their balance and tip over.

Move the banquet trolley only over level floors and on a slope of maximum 10 % (4.5°).

Never try to catch the banquet trolley with your hands if it tips over due to carelessness or external circumstances.

The banquet trolley, especially the safety equipment, must be checked for external visible damages and defects whenever it is put into operation. In case of damage, immediately inform the competent bodies and do not put the banquet trolley into operation.

5.1 Arrangement and Function of the Control Panel

The control panel of the banquet trolley cooled with circulating air is arranged on the cooling element above the opening. The operating temperature for the interior can be set here.

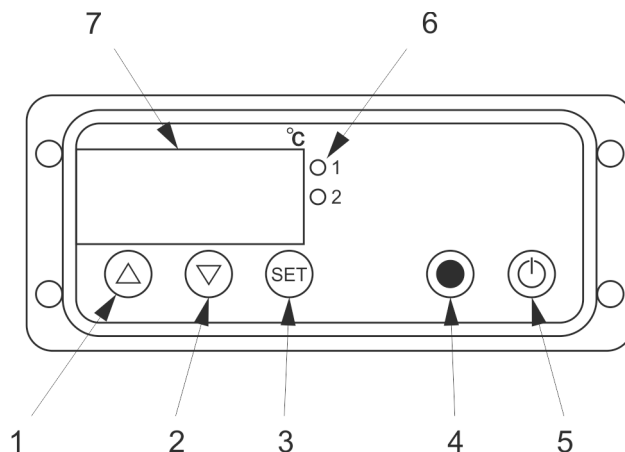


Figure 3

Control panel of the banquet trolley

- | | | | |
|---|-----------------|---|---------|
| 1 | UP | 5 | On/Off |
| 2 | DOWN | 6 | LEDs |
| 3 | SET | 7 | Display |
| 4 | Selector switch | | |

Position number	Control	Function
1	UP	Increases the parameter value (temperature)
2	DOWN	Reduces the parameter value (temperature)
3	SET	The set value is displayed.
4	Selector switch	Not programmed
5	On/Off	Powers the control on or off
6	LEDs	LED 1 off: Ventilation on, compressor off, required temperature reached LED 1 on: Ventilation on, compressor on LED 1 flashing: Compressor safety shut-down LED 2: no function
7	Display	Shows the current temperature or error messages. When the banquet trolley is switched off, the display shows OFF.

5.2 Operation

NOTE	Safety shut-down
	<p>When the compressor is switched off, a safety shut-down of approx. 3 minutes is activated before it can be reactivated.</p> <p>If the compressor is required again after the shut-down because the current temperature is rising, LED 1 flashes.</p> <p>Once 3 minutes have elapsed, LED 1 lights up, the compressor starts and cools again.</p>

Step 1: Switching on and setting the temperature

- Connect the banquet trolley to the mains.
- Keep the On/Off button (5) on the control panel pressed for about 5 seconds. The appliance will switch on.
- Press SET (3). The set value will be displayed (the temperature set at factory is 41°F (5°C)).
- Keep the SET button (3) pressed and set the required temperature by pressing the UP (1) or DOWN (2) buttons simultaneously.
After releasing the buttons (1 or 2), the set temperature will be saved automatically and displayed in a display field of the control. The thermostat automatically regulates cooling and maintenance of the set temperature. LED 1 on the switch panel switches off when the temperature is reached.

A temperature from 35.6°F to 50°F (2°C to 10°C) is possible for a normal operation. If the interior is empty, the operating temperature will be reached in approx. 45 minutes.

Step 2: Loading

After the operating temperature has been reached, the banquet trolley can be loaded with food in the Gastronorm containers or meals already portioned on the grids.

- Load the banquet trolley quickly. Ensure that the door does not remain open unnecessarily to keep cold loss as low as possible during the loading.
- Leave the appliance connected to the mains after it has been loaded until the operating temperature is reached again. The control lamp on the display switches off when the temperature is reached.

NOTE	Hot or steaming meals
	<p>Do not put neither hot nor steaming meals into the banquet trolley.</p> <p>The cooling element has to balance the temperature differences between the interior and meals. This causes an increased energy consumption.</p> <p>Let the meals cool down to room temperature before placing them into the appliance.</p>

Step 3: Moving

- Switch off the banquet trolley using the On/Off button (5). Keep the On/Off button (5) on the control panel pressed for about 5 seconds.
- Pull out the mains plug.
- Release the total brakes.
- Push or pull the banquet trolley to the destination place.
- Lock with the total brakes and make sure that they are engaged and that the banquet trolley cannot be moved.
- Reconnect the banquet trolley to the mains.

Step 4: Unloading

- Switch on the banquet trolley using the On/Off button (5). Keep the On/Off button (5) on the control panel pressed for about 5 seconds. The temperature selected before will be set automatically.
- Proceed with serving as quickly as possible.
- When interrupting the serving process, close the door to minimise cold loss.



5.3 Measures at the End of Use

Proceed as follows to switch off the banquet trolley:

- Press the On/Off (5) button on the control panel for 5 seconds in order to switch off the banquet trolley.
- Pull out the mains plug and hang the connecting lead on the holder.
- Apply both total brakes in order to secure the appliance against unintended movement.

6 Troubleshooting and Repair

6.1 Safety Measures

DANGER	Hazardous electrical voltage
	<p>Electrical current can pose a considerable threat to life and physical well-being and may lead to injuries.</p> <p>Switch off the appliance at the mains before performing troubleshooting. Pull out the mains plug and insert it into the plug park provided.</p>
CAUTION	Damage to property and injuries to persons
	<p>Damage to property and injuries to persons may result from electrical and safety-relevant components being replaced by unqualified and uninstructed personnel.</p> <p>Electrical and safety-relevant components may only be replaced by HUPFER® customer service or by qualified specialists authorised by HUPFER®.</p> <p>Installation of these components by third parties other than HUPFER® customer service or qualified specialists authorised by HUPFER® will result in our duty to warranty and liability becoming void.</p>

6.2 Instructions regarding Fault Repair

Please contact our service partners in the event of a malfunction or complaints within the warranty period. Even after the warranty period has expired, you can have necessary repair work carried out by our service partners and qualified electricians.

Servicing should be carried out by authorised specialists only.

Defective components may only be replaced with **HUPFER®** original parts. The modular design simplifies the replacement of individual components.

Always specify the information and corresponding part number indicated on the rating plate when contacting the after-sales service or ordering spare parts.

Regular inspection and maintenance of the appliance prevent disruptions to operations and ensure safety.

6.3 Fault and Action Table

Fault	Possible cause	Remedy
Cooling capacity is reduced	Condenser got dusty	Clean the condenser
Coolant spills	Defective cooling conduit	Switch off the banquet trolley and call a technician
Running noise of casters	Defective caster bearings	Replace the casters
	Sticky surface of the casters	Clean the casters with water




If an error occurs in the control, an error message is shown on the display. The red LED flashes.

The following table shows the possible error messages and their solution:

Error message	Cause	Remedy
E IL	Error at sensor F1, short circuit	Have temperature sensor F1 checked and replaced by an qualified electrician, if required
E IH	Error at sensor F1, breakage	Have temperature sensor F1 checked and replaced by an qualified electrician, if required
EP 0	Internal controller error	Have controller repaired by a qualified electrician
EP I	Error in the parameter memory	Have all parameters checked by a qualified electrician

7 Cleaning and Care

7.1 Safety Measures

DANGER	Hazardous electrical voltage
	<p>Electrical current can pose a considerable threat to life and physical well-being and may lead to injuries.</p> <p>Before cleaning, switch off the appliance and take it off the power supply. Pull out the mains plug and insert the connecting lead into the holder at the banquet trolley provided for this purpose or reel it up on the holders of the thermal module.</p> <p>Do not spray the appliance and especially the electrical housings with water or cleaning agents while cleaning.</p>
CAUTION	Damage to property and injuries to persons
	<p>The appliance should not be cleaned with running water, or steam-jet or high-pressure cleaners. The appliance must be taken out of operation and switched off at the mains beforehand in any area where high-pressure steam or pressure washers are to be used.</p>
CAUTION	Appliance damage
	<p>Never use chloride-containing cleaning agents, abrasive cleaning powder or steel wool to clean the control panel. Aggressive cleaning agents can destroy plastics and scratch the display.</p> <p>Use lukewarm water and a soft cloth to clean the control panel.</p>

7.2 Hygiene Measures

It is essential for operating staff to act in the correct manner to ensure optimal hygiene. All persons must have sufficient knowledge about the locally valid hygiene regulations, observe them and comply with them.

Use a waterproof plaster to cover wounds on hands and arms.

Never sneeze or cough on clean crockery or meals.

7.3 Cleaning and Care

If the banquet trolley is handled with care, cleaned and maintained on a regular basis and is not exposed to excess moisture, it does not require any additional care measures.

The interior of the trolley should be cleaned regularly, at the latest every 25 operating hours, to ensure a hygienically perfect operation.

To clean thoroughly and quickly, wipe the interior of the banquet trolley with a soft cloth. Use a soft cleaning cloth or an uncoated sponge for cleaning. Use degreasing liquid cleansers that are approved for the food industry.

Never use high-pressure cleaners, chloride-based cleaning agents, abrasive cleaning powder or other dry cleaning agents, steel wool, steel sponges and/or sharp-edged items.

Proceed as follows to clean the banquet trolley:

- Switch off the appliance and disconnect it from the mains.
- Open the door.
- Lift up the support ledge frames and take them out of the holders.
- Wipe the interior and the exterior panelling and grids.

7.3.1 Cleaning and Care Measures

Cleaning and care measures	Action	daily	weekly	monthly	Interval
Interior of the banquet trolley	clean				x ¹
Ball bearing mounted casters pivoted on the axle	lubricate				x ²
Connecting lead: mechanical damages and obsolescence	check				x ³
Mains plug: mechanical damages and obsolescence	check				x ³
Condenser in the roof of the trolley	clean				x ²

x¹ = if necessary, every 25 operating hours at the latest

x² = every 2 months

x³ = every 6 months

7.4 Special Care Instructions

Resistance to corrosion in stainless steel is provided by a passive layer which is formed on the surface when oxygen is absorbed. The oxygen in air is sufficient to form the passive layer, so that damage caused by physical action is eliminated automatically.

The passive layer develops or is renewed more quickly when the steel comes into contact with water containing oxygen. The passive layer can be chemically damaged or breached by agents which have a reducing (oxygen-consuming) effect when they come into contact with steel at concentrated levels or at high temperatures.

Such aggressive substances include:

- substances containing salt and sulphur
- chlorides (salts)
- seasoning concentrates (e.g. mustard, vinegar essence, seasoning cubes, saline solutions)

Further damages can occur due to:

- extraneous rust (e.g. from other components, tools or rust film)
- iron particles (e.g. grinding dust)
- contact with non-ferrous metals (element formation)
- lack of oxygen (e.g. no admission of air, low-oxygen water).


General working principles for handling appliances made of "refined stainless steel":

- Always keep the surface of appliances made from stainless steel clean and open to air.
- Use cleaning agents suitable for stainless steel. Never use bleaching cleaning agents or any containing chlorides.
- Remove layers of lime scale, grease, starch and egg-white by cleaning daily. Corrosion may occur underneath these layers due to lack of air absorption.
- After each cleaning operation remove all cleaning agent residues by wiping thoroughly. The surface should be thoroughly dried after wiping.
- Do not bring items made of stainless steel into contact with substances such as concentrated acids, seasonings and salts for longer than is absolutely necessary. Acid fumes emitted when tiles are cleaned also cause corrosion in "refined stainless steel".
- Avoid damaging the surface of the stainless steel, especially by bringing into contact with metals other than stainless steel.

- Residues from other metals produce extremely small amounts of chemical elements which can cause corrosion. Contact with iron and steel must be avoided at all costs, because it will cause extraneous rust. If stainless steel comes into contact with iron (steel wool, steel particles from pipes, water containing iron), this can trigger corrosion. Therefore, only use refined steel wool or brushes with natural, plastics or refined steel bristles only for physical cleaning. Steel wool or brushes with unalloyed steel cause extraneous rust due to abrasion.

8 Spare Parts and Accessories

8.1 Safety Measures

CAUTION	Damage to property and injuries to persons
	<p>Damage to property and injuries to persons may result from electrical and safety-relevant components being replaced by unqualified and uninstructed personnel.</p> <p>Electrical and safety-relevant components may only be replaced by qualified specialists authorised by HUPFER® or by HUPFER® customer service.</p> <p>Installation of these components by third parties other than qualified specialists authorised by HUPFER® or by HUPFER® customer service will result in our duty to warranty and liability becoming void.</p>

8.2 Notes on Servicing

Servicing should be carried out by authorised specialists only.

Defective components should only be replaced with HUPFER® original parts. That is the only way to guarantee a safe operation and long service life along with a high transport capacity.

Always specify the data and corresponding item code provided on the rating plate when consulting the after-sales service or ordering spare parts.

Always state the order number and corresponding part number when ordering replacement parts. The order number is given on the rating plate of the banquet trolley.

Always keep a full set of replacement parts in stock as a reserve or take out a maintenance contract with a specialist dealer, so that you are not left unable to use the appliance for long periods of time.

8.3 Spare Parts and Accessories List

BKW1/40 B-GN UK

014000152	Fixed caster	Ø 6.3" (160 mm), caster bearing	Steel housing galvanised
014000151	Swivel caster	Ø 6.3" (160 mm) with lock, caster bearing	Steel housing galvanised

The following plug types can be used with banquet trolleys:

- 2-pole Schuko angle plug (standard)
- CEE plug 230 V - 16 A - 3-pole in Germany on request, in Switzerland standard
- 3-pole British mains plug in accordance with BS 1363 A for Great Britain and Hong Kong.