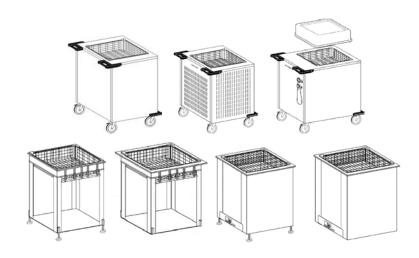


Operating Instructions



Basket Dispenser

KO/50-50 | KO/65-53 | KO/50-50K | KO/65-53K | KOUH/50-50 | KOUH/65-53 | EBS/50-50 | EBS-T/50-50 | EBSH/50-50 | EBSH-T/50-50

1 Introduction

1.1 Appliance Information

Appliance name Basket Dispenser

Appliance type/s KO/50-50 | KO/65-53 | KO/50-50K | KO/65-53K |

KOUH/50-50 | KOUH/65-53 | EBS/50-50 | EBS-T/50-50 |

EBSH/50-50 | EBSH-T/50-50

Year of manufacture 2014

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Read these operating instructions thoroughly to ensure safe operation and avoid any damage before using the appliance for the first time.

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 the products and related technical documentation in the interests of technical progress. The data, weight specifications and the performance and functions description stated as binding in the order confirmation are always decisive.

This manual is a translation of the original edition.

Manual edition 4330007_A2



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1.3 List of Abbreviations

Abbreviation	Definition		
BGR	German Employers' Liability Insurance Association rule (Berufsgenossenschaftliche Regel)		
BGV	German Employers' Liability Insurance Association regulations (<i>Berufsgenossenschaftliche Vorschrift</i>)		
CE	Communauté Européenee European Community		
DIN	Deutsches Institut für Normung 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 (Ersatz- bzw. Verschleißteil)		
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		
	No protection against contact, no protection against ingress of water tion against ingress of solid foreign objects		
	1 Protection against contact with any large surface of the body such as the hand, protection against ingress of foreign objects Ø>1.9" (50 mm) 1 Protection against dripping water (vertically falling drops)		
	2 Protection against contact with the fingers, protection against ingress of foreign objects Ø > 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 Ø >0.09" (2.5 mm), protection against foreign objects Ø >0.09" (2.5 mm)		
	4 Protection against contact with tools, wires or similar objects of ⊘>0.04" (1 mm), protection against foreign objects ⊘>0.04" (1 mm)		
	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	German Regulations on the Hygiene of Foodstuffs		
RCE	Residual-current device (RCD) The use of the English term RCD (residual-current device) is customary in industrial standards in the EU.		



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.
Cloche	A bell-shaped cover for keeping food warm on plates and dishes.
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.
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.
EN tray	A European standard tray is a tray in a standard size. EN 1/1 corresponds to 20.9x14.6" (530×370 mm), EN 1/2 corresponds to 14.6x10.4" (370×265 mm).
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.
Gastronorm	Gastronorm is a measurement system used worldwide in places such as food processing plants or Großküchen 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 20.9x12.8" (530×325mm). Items are available in different depths.
H1	Hygienic standard (NSF/USDA) for lubricants that are suitable for incidental and technically unavoidable contact with foodstuffs
HACCP	HACCP is a preventive system that is designed to ensure the safety of foods and consumers.
GN tray	A Gastronorm standard tray is a standard-size tray. GN 1/1 corresponds to 20.9x12.8" (530×325 mm), GN 1/2 corresponds to 12.8x10.4" (325×265 mm).
Lift	A movement such as the vertical movement of the stacking platform from bottom to top.
Check, inspect	Compare with certain conditions and/or characteristics such as damage, leaks, filling levels and heat.
Convection	Physical properties or mass transfer (e.g. heat or cold) through currents in gases and liquids.
Corrosion	The chemical reaction of a metallic material with its surroundings, e.g. rust.
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.
Check	Compare with certain values such as weight, torque, content or temperature.
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.
Instructed persons	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.



1.5 Orientation of the Appliance

The front

The "front" refers to the side where the push bars are arranged. The operating staff stays at this side to move the basket dispenser.

The side of the built-in appliances named as "the front" means the side, at which the staff operates the appliances.

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.

The left

The "left" refers to the left hand side when viewed from the 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

DANGER

Brief description of hazard



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.

The type of danger is indicated by a symbol and explained in the accompanying text in more detail. The general symbol for danger is used in this example.

WARNING

Brief description of hazard



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.

The type of danger is indicated by a symbol and explained in the accompanying text in more detail. The general symbol for danger is used in this example.

ATTENTION

Brief description of hazard



There is a potential risk of injury or damage to property if the instructions are not followed precisely or the circumstances described are not taken into account

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.

NOTE

Brief description of additional information

Attention is pointed to special conditions or additional important information on the topic concerned.

INFO

Short title

Contains additional information on aspects which make work easier or recommendations on the topic concerned.



2 Safety Instructions

2.1 Introduction

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

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



Hazard caused by hot surfaces



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.

2.3.1 Safety Instructions for all Appliances

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

- The appliance may only be operated when it is in perfect condition with regards to technical standards.
- All operating and actuating elements must be in a perfect, fail-safe condition with regards to technical standards.
- Modifications or retrofits to the equipment are only permitted after consultation with the manufacturer and upon receipt of their consent in writing.
- People must not sit or stand on the appliance under any circumstances. Transport of persons is not permitted.
- Crockery with already portioned food must only be stored temporarily in basket dispensers with cooling slots in cold stores and always in consideration of respective legal directives on food storage duration and temperature.
- Before loading, the dispensing height must be adjusted to the kind of crockery and crockery basket (3" (75 mm) or 4 1/2" (115 mm)) used.



- To avoid hand injuries, care should always be taken to ensure that the upper edge of the uppermost crockery basket is at least 1.38" (35 mm) above the upper edge of the housing.
- Never push the crockery basket down manually into the stacking compartment (e.g. for cleaning).
 There is a risk of injury if the crockery basket is released.
- Mobile appliances are 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 locks before moving the appliance. Moving the appliance when the total lock casters are engaged can damage the chassis.
- The appliance should only be transported over level floors. Moving the appliance over very uneven floors can damage the chassis.
- It is not permitted to transport the appliance over steep inclines or steps.
- When approaching walls and moving round obstacles, always look out for persons in your path. Risk
 of injury.
- Always hold both handles with your hands when transporting the appliance. Never release the appliance while moving it.
- Move no faster than a walking pace when transporting the appliance. Heavily laden basket dispensers are difficult to brake and steer. If necessary, ask for assistance when transporting the appliance.
- If the basket dispenser tips over due to outside influences or inattention, never catch it manually. Risk
 of injury.
- Do not park the appliance on sloping floors.
- After stopping, the appliance should be secured against rolling away by means of both total locks being applied.
- The appliances should be safely secured when transported off site inside a vehicle such as a truck. The total lock casters are not sufficient as a transport securing method.

2.3.2 Additional Safety Instructions for Heated Appliances

- Heated basket dispensers are intended for dispensing heated crockery. They must not be used to cook food and keep it warm or to heat rooms.
- Crockery may exceed the maximum permitted temperature of 149°F (65°C) for touchable appliance surfaces. Always wear protective gloves when dispensing hot crockery. Risk of burning.
- Never reach into it and touch the heating element with the fingers when the appliance is in operation.
 Risk of burning.
- Plastic crockery, top and bottom parts of plastic insulated sets and plastic-coated items for keeping
 food warm should not be stored or warmed up in heated basket dispensers. The plastics can melt and
 catch fire due to the high temperature in the heating element.
- Plastic stacking baskets shall not be inserted into heated basket dispensers. The plastic can melt and catch fire.
- If the cover made of stainless steel is used, its outer edges may heat up to over 149 °F (65°C). You must only touch the cover with protective gloves to avoid skin inflammation.
- The base plate and used air from the base outlets can become very hot. The appliance should not be operated on fibre-based floor coverings, such as carpets or mats.
- Before transporting, switch off the appliance, pull out the mains plug and place it into the holder provided.
- Forceful straining of the connecting cable can lead to damage to the internal line. Risk of fire.
- Never pull the mains plug out of the socket by the wire. HUPFER® appliances in a standard design are equipped with a Schuko angle plug. Unlike a straight Schuko plug, this plug only projects slightly from the socket and so cannot be damaged by impact from the side. If the appliance is moved without pulling out the mains plug beforehand, the socket can be severely damaged or even pulled out from the wall as a result of leverage arising from overstretching of the connecting cable.
- Never move the appliance by pulling by the connecting cable.



- If the mains plug has come into contact with water, it must be dried before inserting it into the socket.
 Danger to life.
- Damaged mains plugs or connecting cables are to be replaced by authorised personnel before the appliance is used.
- Do not use any extension cables in wet and damp areas.
- Only insert mains plugs into suitable sockets. If the mains plug does not fit, the connecting cable of the appliance is to be retrofitted by authorised specialist staff.
- The use of socket adapters is not permitted. Risk of fire.
- Do not clean the appliance with 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 steam-jet or high-pressure
 cleaners are to be used.
- Heated basket dispensers shall not be used to dry crockery or other items for hygiene reasons. There
 is a risk of germ infection.
- A temporary storage lasting longer than three months must take place in a dry and frost-free environment. The appliance must be kept covered with a suitable covering material to be protected against dust ingress.

2.4 Safety Instructions for Cleaning and Care

The following points must be observed when carrying out any cleaning and care operations:

- Cleaning instructions must be strictly observed for reasons of hygiene.
- Take the appliance out of operation before starting the cleaning process. Pull out the mains plug and place it into the holder located on the appliance.
- For cleaning, the appliance must be out of operation and cooled down sufficiently.
- Do not clean the appliance with 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 steam-jet or high-pressure
 cleaners are to be used.
- Even appliances without an electrical connection should not be cleaned with running water or pressurised water.

2.5 Safety Instructions regarding Fault Repair

The following points shall be observed when carrying out any maintenance or fault repairs:

- Any fault repairs should be carried out by authorised specialists only.
- You must ensure that the appliance is switched off when carrying out repairs. The appliance must be switched off at the mains and secured against reactivation when working on the electrical system.
- The local Accident Prevention Regulations in force must be observed.
- Defective components should be replaced with original parts only.

2.6 Notes on Specific Hazards

Electric power

- All work on the electrical installations should only be carried out by a qualified electrician, or by authorised specialists under the direction and supervision of a qualified electrician as per 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

Basket dispensers are mobile appliances intended for efficient transport and storage of clean crockery items ready for use in the food service industry and large-scale catering establishments.

They accommodate china items or crockery items made of toughened glass difficult to stack stored in baskets stacked upon each other.

They are used mainly for temporary storage or storage of crockery ready for use on the food distribution belt. The non-heated models with the enclosed side and front walls of the housing store crockery items ready for use for serving portions of cold dishes.

The non-heated models with cooling slots store crockery ready for serving portions of cold side dishes, e.g. salads and desserts. They can be also used for temporary storage of crockery with already portioned and covered food in the cold store.

The models heated with circulating air are intended for storage of crockery ready for serving portions of warm components, e.g. soups, warm side dishes, cups, mugs or pots. The crockery can be heated up to 176°F (80 °C).

Besides the mobile basket dispensers, there are basket dispensers intended for installation in worktops.

3.2 Proper Use

Basket dispensers are used exclusively for transport and storage of clean crockery ready for use. Depending on the model, the loaded crockery can be cooled or warm when dispensing.

The appliances are intended for transporting round or square china or toughened glass crockery items. Transport of other types of loads is not permitted.

Crockery with already portioned food shall only be stored in basket dispensers with cooling slots.

Stackable plastic baskets produced by any manufacturer shall be only used in the non-heated appliances without cooling slots.

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

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

3.3 Improper Use

It is not permitted to load the basket dispenser with other loads than specified.

People must not sit or stand on the appliance under any circumstances.

Transport of persons is not permitted.

Moreover, it is not permitted to use the heated basket dispensers for cooking food or keeping it warm, for room heating and drying the crockery. Neither plastic baskets nor crockery items made of plastic shall be stored in heated basket dispensers.

No liability is assumed and no warranty claims can be submitted for damages caused by improper use.



3.4 Appliance Description

3.4.1 View of the Appliance

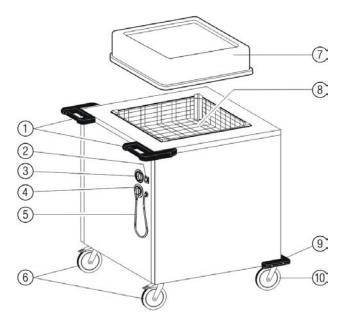


Figure 1 View of the appliance KOUH/50-50

- Safety push bars with integrated bumper
- 2 On/off switch*
- 3 Thermostat for setting the temperature*
- 4 Plug park (dummy socket)*
- 5 Connecting cable with mains plug
- * heated appliances only

- 6 Swivel casters with total lock
- 7 Plastic cover*
- 8 Crockery basket
- 9 Corner bumpers
- 10 Swivel casters without brakes

3.4.2 Appliance Description

Basket dispensers accommodate stackable crockery items made of porcelain or toughened glass difficult to stack stored in baskets stacked upon each other.

The base basket with a height of 5.9" (150 mm) is spring loaded. A continuously increasing weight of the loaded crockery pushes down the crockery basket and so further crockery baskets can be placed. When crockery is removed, the crockery baskets move up so that the next crockery item is always at hand resting at the required dispensing height.

Crockery baskets are available in two heights (2.9" (75 mm) and 4.5" (115 mm)). The kind of crockery basket used for the further stacking depends on the crockery used. In general, higher capacities are achieved with the 4.5" (115 mm) baskets.

Depending on the model, mobile basket dispensers are designed for different purposes of use.

KO/50-50 and KO/65-53 are non-heated and without a cooling unit. They can be used for stacking saucers, coffee cups, mugs, eggcups, long narrow set plates and plastic covers.

KO/50-50K and KO/65-53K are non-heated, however, particularly suitable to be used in cold stores. They are intended for storing cooled crockery ready for use for serving portions of cold food components. Moreover, they accommodate crockery with already portioned food. When used in the cold store, the cooling slots arranged on the side and front walls of the appliance housing ensure a rapid exchange of air and allow the cold air to be distributed uniformly inside.

The heated models KOUH/50-50 and KOUH/65-53 are used mainly to stack, heat and store crockery items ready for portioning warm components at the food distribution belt.

In contrast to the mobile appliances, the basket dispensers EBS/50-50, EBS-T/50-50, EBSH/50-50 and EBSH-T/50-50 are intended for being installed into worktops. EBSH/50-50 and EBSH-T/50-50 are equipped with a heating module and, therefore, enable additionally heating of crockery items used for serving portions of hot food.



The operating temperature can be continuously set on the heated basket dispensers. The controller is fitted to the front of the housing or can be adjusted as required when using built-in appliances.

Basket dispensers can be covered with a cover made of stainless steel or plastic that protects the crockery against dust and condensation even during relatively long periods of temporary storage. Using a cover in the heated appliances lowers the heat loss upwards and reduces the heating time of the inserted crockery or delays the cooling of pre-warmed crockery.

3.4.3 Optional Accessories

The following parts can be applied as optional accessories for the basket dispenser:

- Plastic cover 50-50, grey, height 6.6" (170 mm), usable internal height for crockery baskets is 5.9" (150 mm) *
- Plastic cover 65-53, grey, height 6.6" (170 mm), usable internal height for crockery baskets is 5.9" (150 mm) **
- Stainless steel cover 50-50, single-walled, height 5.1" (130 mm), usable internal height for crockery baskets is 4.4" (114 mm)
- Stainless steel cover 65-53, single-walled, height 5.1" (130 mm), usable internal height for crockery baskets is 4.4" (114 mm)
- Crockery baskets 19.6 x 19.6 x 2.9" (500 x 500 x 75 mm) or 19.6 x 19.6 x 2.9" (500 x 500 x 115 mm), plastic-coated stainless steel or electropolished stainless steel, with corner flaps
- Crockery baskets 25.5 x 20.8 x 2.9" (650 x 530 x 75 mm) or 25.5 x 20.8 x 4.5" (650 x 530 x 115 mm), plastic-coated stainless steel or electropolished stainless steel, with corner flaps
- Peripheral bumper strip made of impact-resistant plastic
- Swivel casters made of stainless steel, Ø = 4.92" with and without total locks, plate attachment
- * Standard in KOUH/50-50, EBSH/50-50 and EBSH-T/50-50
- **Standard in KOUH/65-53

The item code for the special accessories can be found in the spare parts catalogue and the online order lists



3.5 Technical Data

	Dim.	KO/50-50	KO/50-50K	KO/65-53	KO/65-53K
		Basket dispenser, non-heated and without cooling unit	Basket dispenser, non-heated and with cooling unit	Basket dispenser, non-heated and without cooling unit	Basket dispenser, non-heated and with cooling unit
Tare weight	lbs (kg)	99.2 (45)	97 (44)	103.6 (47)	101.4 (46)
Payload	lbs (kg)	341.7 (155)	343.9 (156)	337.3 (153)	339.5 (154)
Permitted total weight	lbs (kg)	440.9 (200)	440.9 (200)	440.9 (200)	440.9 (200)
Overall dimensions w x d x h	in (mm)	29.9 x 28 x 35.4 (760 x 712 x 900)	29.9 x 28 x 35.4 (760 x 712 x 900)	29.9 x 33.5 x 35.4 (760 x 852 x 900)	29.9 x 33.5 x 35.4 (760 x 852 x 900)
Operating and ambient conditions	°F (°C)	-68 to 122 (-20 to +50)	-68 to 122 (-20 to +50)	-68 to 122 (-20 to +50)	-68 to 122 (-20 to +50)
Chassis	in (mm)	4 swivel casters, 2 with total locks, Ø 4.92" (125)	4 swivel casters, 2 with total locks, Ø 4.92" (125)	4 swivel casters, 2 with total locks, Ø 4.92" (125)	4 swivel casters, 2 with total locks, Ø 4.92" (125)
Stacking platform		Plastic-coated, stainless steel basket	Plastic-coated, stainless steel basket	Plastic-coated, stainless steel basket	Plastic-coated, stainless steel basket
Dimensions of base basket	in (mm)	19.6x19.6x2.9 (500x500x150)	19.6x19.6x2.9 (500x500x150)	25.5x20.8x5.9 (650x530x150)	25.5x20.8x5.9 (650x530x150)
Dimensions of usable crockery baskets	in (mm)	19.6x19.6x2.9 (500 x 500 x 75) 19.6 x 19.6 x 4.52 (500 x 500 x 115) 19.9 x 19.9 (508 x 508)	19.6x19.6x2.9 (500 x 500 x 75) 19.6 x 19.6 x 4.52 (500 x 500 x 115) 19.9 x 19.9 (508 x 508)	25.5 x 20.8 x 2.9 (650 x 530 x 75) 25.5 x 20.8 x 4.52 (650 x 530 x 115)	25.5 x 20.8 x 2.9 (650 x 530 x 75) 25.5 x 20.8 x 4.52 (650 x 530 x 115)
Capacity		additionally 6 bas- kets 6.1" (155 mm) high or 9 baskets 2.9" (75 mm) high	additionally 6 bas- kets 6.1" (155 mm) high or 9 baskets 2.9" (75 mm) high	additionally 6 bas- kets 6.1" (155 mm) high or 9 baskets 2.9" (75 mm) high	additionally 6 bas- kets 6.1" (155 mm) high or 9 baskets 2.9" (75 mm) high
Crockery size		depending on bas- ket size and mesh width	depending on bas- ket size and mesh width	depending on bas- ket size and mesh width	depending on bas- ket size and mesh width
Number of crockery stacks		depending on crockery size	depending on crockery size	depending on crockery size	depending on crockery size



	Dim.	KOUH/50-50	KOUH/65-53
		Basket dispenser, heated with circulating air	Basket dispenser, heated with circulating air
Tare weight	lbs (kg)	149.9 (68)	152.1 (69)
Payload	lbs (kg)	291 (132)	288 (131)
Permitted total weight	lbs (kg)	440.9 (200)	440.9 (200)
Overall dimensions w x d x h	in (mm)	29.9 x 33.5 x 35.4 (760 x 852 x 900)	(29.9 x 39 x 35.4) 760 x 992 x 900
Operating and ambient conditions	°F (°C)	-68 to 122 (-20 to +50)	-68 to 122 (-20 to +50)
Chassis	in (mm)	4 swivel casters, 2 with total locks, Ø 4.92" (125)	4 swivel casters, 2 with total locks, Ø 4.92" (125)
Stacking platform		Plastic-coated, stainless steel basket	Plastic-coated, stainless steel basket
Dimensions of base basket	in (mm)	19.6x19.6x5.9 (500x500x150)	25.5x20.8x5.9 (650x530x150)
Dimensions of usable crockery baskets	in (mm)	19.6x19.6x2.9 (500 x 500 x 75) 19.6x19.6x4.5 (500 x 500 x 115)	25.5 x 20.8 x 2.9 (650 x 530 75) 25.5 x 20.8 x 4.5 (650 x 530 115)
Capacity		additionally 6 baskets 6.1 (155 mm) high or 9 baskets 2.9 (75 mm) high	additionally 6 baskets 6.1" (155 mm) high or 9 baskets 2.9" (75 mm) high
Crockery size		depending on basket size and mesh width	depending on basket size and mesh width
Number of crockery stacks		depending on crockery size	depending on crockery size
Electrical connection		230 V 1N AC 50 Hz	230 V 1N AC 50 Hz
Connection value	kW	2.0	2.0
Length of connecting lead (coiled lead)	m	1.8	1.8
Protection rating		IPX5	IPX5
Heating		Circulating air	Circulating air
Heat insulation		Mineral fibre mat	Mineral fibre mat
Thermostat setting	°F (°C)	86-239 (30-115)	86-239 (30-115)
Maximum crockery temperature	°F (°C)	176 (80)	176 (80)
Temperature regulation		Continuous adjustment	Continuous adjustment



	Dim.	EBS/50-50	EBS-T/50-50	EBSH/50-50	EBSH-T/50-50
		Built-in basket dispenser, non-heated	Basket dispenser for installation from above, non-heated	Built-in basket dis- penser, heated	Basket dispenser for installation from above, heated
Tare weight	lbs (kg)	35.2 (16)	37.4 (17)	90.3 (41)	94.7 (43)
Payload	lbs (kg)	262.3 (119)	266.7 (121)	295.4 (134)	291 (132)
Permitted total weight	lbs (kg)	297.6 (135)	304.2 (138)	385.8 (175)	385.8 (175)
Overall dimensions w x d x h	in (mm)	24.4 x 21.25 x 25.1 (620 x 540 x 640)	25.1 x 23.6 x 25.5 (640 x 600 x 650)	24.4 x 24.4 x 25.1 (620 x 620 x 640)	25.9 x 25.9 x 25.5 (660 x 660 x 650)
Worktop cutout	in (mm)	20.7 x 20.7 (526 x 526)	24 x 22.2 (610 x 566)	20.7 x 20.7 (526 x 526)	24.8 x 24.8 (630 x 630)
Operating and ambient conditions	°F (°C)	-68 to 122 (-20 to +50)			
Stacking plat- form		Plastic-coated, stainless steel bas- ket	Plastic-coated, stainless steel bas- ket	Plastic-coated, stainless steel bas- ket	Plastic-coated, stainless steel bas- ket
Dimensions of base basket	in (mm)	19.6x19.6x5.9 (500x500x150)	19.6x19.6x5.9 (500x500x150)	19.6x19.6x5.9 (500x500x150)	25.5x20.8x5.9 (650x530x150)
Dimensions of usable crockery baskets	in (mm)	19.6x19.6x2.9 (500 x 500 x 75) 19.6x19.6x4.5 (500 x 500 x 115)	19.6x19.6x2.9 (500 x 500 x 75) 19.6x19.6x4.5 (500 x 500 x 115)	19.6x19.6x2.9 (500 x 500 x 75) 19.6x19.6x4.5 (500 x 500 x 115)	19.6x19.6x2.9 (500 x 500 x 75) 19.6x19.6x4.5 (500 x 500 x 115)
Crockery size		depending on bas- ket size and mesh width			
Number of crockery stacks		depending on crockery size			
Electrical connection		-	-	230 V 1N AC 50 Hz	230 V 1N AC 50 Hz
Connection value	kW	-	-	2.0	2.0
Protection rating		-	-	IPX5	IPX5
Heating		-	-	Power module (static)	Power module (static)
Heat insulation		-	-	-	-
Thermostat setting	°F (°C)	-	-	68-185 (20-85)	68-185 (20-85)
Maximum crockery temperature	°F (°C)	-	-	176 (80)	176 (80)
Temperature setting		-	-	continuous adjust- ment	Continuous adjust- ment

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



3.6 Rating Plate

The rating plate is on the rear of the appliance.

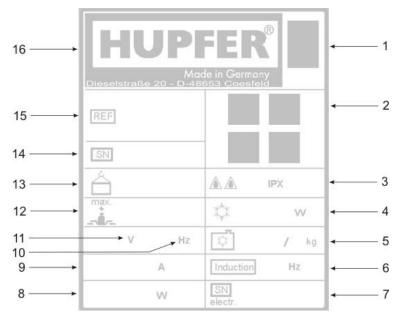


Figure 2 Rating plate

1	Disposal of old appliances	9	Nominal current
2	Certificates/label	10	Frequency
3	Protection class	11	Nominal voltage
4	Chilling 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, Installation, Putting into Operation and Taking out of Service

4.1 Transport

ATTENTION

Damage to appliances caused by improper transport



Appliances should be safely secured when transported off site inside a vehicle such as a truck. The total lock casters are not suitable for securing the appliances when they are transported in a vehicle.

If the appliances are not secured properly, there is a risk of damage to property and harm to persons caused by squashing.

Secure each individual separate appliance using suitable transport securing devices

4.2 Assembly (Built-in appliances only)

ATTENTION

Exposed springs



If the stacking platform is pressed down by hand, the springs are exposed. Reaching into the gaps of the exposed springs may cause hand injuries.

Never press the stacking platform down by hand.

Be careful when attaching and detaching the springs. Pay particular attention to the ends of the tension springs when adjusting springs on sharp edges.

The following section describes the assembly of the built-in basket dispenser.

Primarily, the non-heated appliances EBS/50-50 and EBS-T/50-50 are described that do not require any electrical installations after the assembly.

Subsequently, there follows the assembly description of the heated appliances EBSH/50-50 and EBSH-T/50-50, that must be connected to the power supply after the assembly.

4.2.1 Non-heated Appliances (EBS/50-50 and EBS-T/50-50)

NOTE	Appliance location
	Built-in appliances may only be used after being retrofitted or built-in (e.g. in a cabinet).

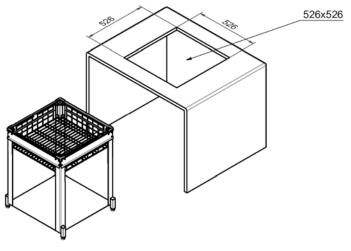


Figure 3 Worktop cut-out EBS/50-50



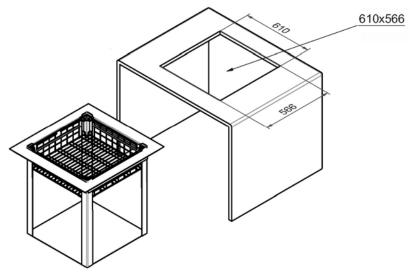


Figure 4 Worktop cut-out EBS-T/50-50

Step 1: Preparation

- Prepare cut-outs in the worktop corresponding to the indicated dimensions.
 The worktop cut-out dimensions are given in mm as shown in the drawing.
- Remove the protective plastic film from the metal sheeting.

Step 2: Installation

EBS/50-50

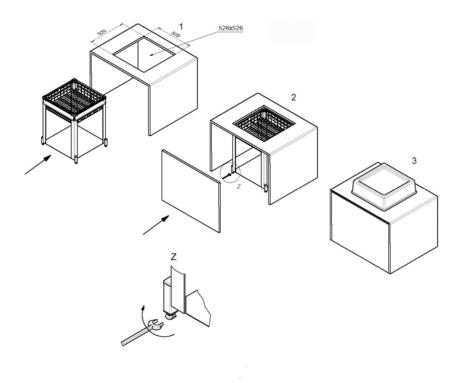


Figure 5 Assembly instructions EBS/50-50

- Adjust the height-adjustable screw feet, so that the appliance can be positioned under the worktop.
- Position the appliance exactly under the cut-out in the counter and adjust the screw feet.
- Fasten the stacking compartment in the worktop cut-out using 4 angled guides.

EBS-T/50-50

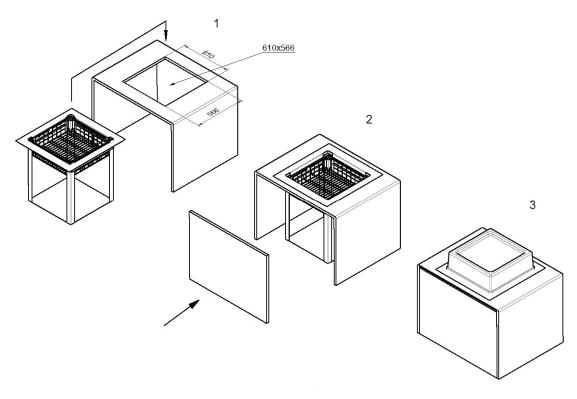


Abbildung 6 Assembly instructions EBS-T/50-50

Insert the appliance EBS-T/50-50 into the worktop cut-out from above. Fasten the screw feet if necessary.

4.2.2 Heated Appliances (EBSH/50-50 and EBSH-T/50-50)

DANGER

Hazardous electrical current



Electrical current can pose a considerable threat to life and physical well-being and may lead to injuries.

All work on the electrical installations should only be carried out by a qualified electrician, or by authorised specialists under the direction and supervision of a qualified electrician as per the applicable electro-technical regulations.

ATTENTION

Exposed springs



If the stacking platform is pressed down by hand, the springs are exposed. Reaching into the gaps of the exposed springs may cause hand injuries.

Never press the stacking platform down by hand.

Be careful when attaching and detaching the springs. Pay particular attention to the ends of the tension springs when adjusting springs on sharp edges.

ATTENTION	Hazard caused by hot surfaces
\bigwedge	The internal surfaces and base plates of the heated appliances can become hot during and/or after the operation. Heated appliances should not come into contact with easily inflammable materials.
	Ensure that there is enough space between the housing and cladding for air to circulate.
NOTE	Appliance location
	The built-in appliances may only be put into operation after being retrofitted or built-in (e.g. in a cabinet).
NOTE	Position of the power supply socket
	The on-site power supply socket must be accessible at all times, so that the appliance mains plug can be pulled out if necessary.

There is a connecting cable set with a wiring diagram attached to the built-in heated appliances. The set consists of an on-site connecting cable with a Schuko® plug and a connecting cable with an appliance plug. The connecting cables are wired up with the on/off switch with an integrated indicator light.

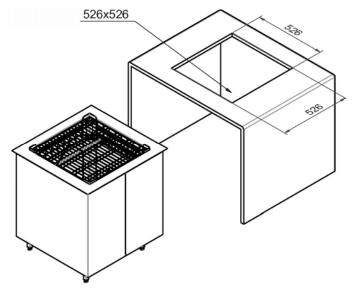


Figure 7 Worktop cut-out EBSH/50-50

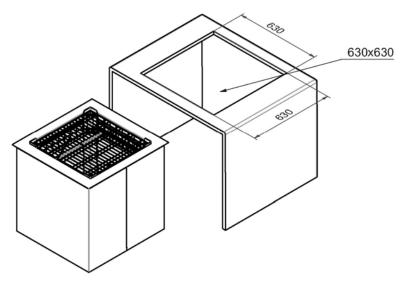


Figure 8 Worktop cut-out EBSH-T/50-50

Step 1: Preparation

- Make cut-outs in the worktop and prepare the front facing panel using the dimensions provided. The worktop cut-out dimensions are given in inch (mm) as shown in the corresponding drawing of the built-in appliance. The cut-out dimension for the switch is 1.2x0.9" (30x22 mm).
- Remove the protective plastic film from the metal sheeting.

Step 2: Installation

NOTE	Presetting the operating temperature
	Unlike mobile appliances where the switch and controller are positioned next to one another, the switch for the built-in appliance can be fitted anywhere on its front.
	It may no longer be possible to access the controller to make adjustments after the installation. Ensure that the required temperature is set on the thermostat before installation.



EBSH/50-50

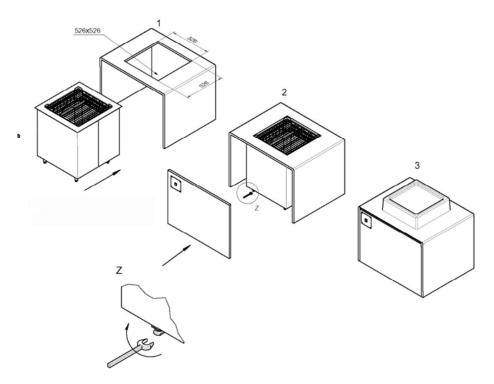


Figure 9 Assembly instructions EBSH/50-50

- Adjust the height-adjustable screw feet, so that the appliance can be positioned under the worktop.
- Position the appliance exactly under the worktop cut-out in the counter.
- Fasten the screw feet and the appliance in the worktop cut-out using 4 angled guides.

EBSH-T/50-50

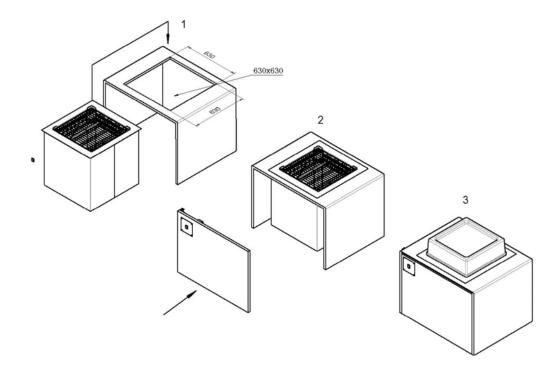




Figure 10 Assembly instructions EBSH-T/50-50

Insert the appliance EBSH-T/50-50 into the worktop cut-out from above. Fasten the screw feet if necessary.

Step 3: Connect

NOTE	Position of the power supply socket
	The on-site power supply socket must be accessible at all times, so that the appliance mains plug can be pulled out if necessary.

The appliance plug from the connecting cable set must be plugged into the socket of the basket dispenser. The mains plug of the connecting cable set must be inserted into the available power supply socket. The appliance is now ready to be put into operation.

The appliance should be assembled so that the mains plug is accessible at all times.

4.3 Putting into Operation

Before the first use of the mobile basket dispenser, the protective plastic film has to be removed from the metal sheeting.

INFO	Disposal of packing material
	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

Before putting the appliance into operation, it is necessary to check whether it functions correctly.

The following functions are to be checked separately:

- In the mobile appliances: Correct functioning of total lock casters.
- In the heated appliances: Correct functioning of control elements and heating.
- In built-in appliances: The on/off switch and the mains plug must be accessible

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

4.4 Storage and Recycling

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

The basket dispenser kept in the storage location must be checked for damages and corrosion every 6 months.

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

The appliance must be clean and dry before it is placed back into use.

If the basket dispenser is to be recycled, any heating devices must be fully removed safely; recyclable materials must be separated properly and disposed of in an environmentally friendly way as per local waste disposal regulations. The local agencies responsible for disposal must be contacted regarding removal.



5 Operation

ATTENTION Exposed springs



If the stacking platform is pressed down by hand, the springs are exposed. Reaching into the gaps of the exposed springs may cause hand injuries.

Never press the stacking platform down by hand.

Be careful when attaching and detaching the springs. Pay particular attention to the ends of the tension springs when adjusting springs on sharp edges.

5.1 Arrangement and Function of the Control Elements

The operating elements are located on the front of the housing of the heated basket dispensers.

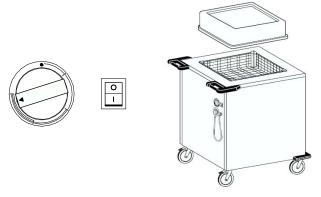


Figure 11 Operating elements

The required temperature can be set on the thermostat. Continuous adjustment is possible within the 4 power ranges. The on/off switch of the appliance is arranged next to it. An indicator light integrated into the switch shows, whether the appliance is ready to for use.

5.2 Adjustment of Basket Dispenser

WARNING Hazard caused by hot surfaces



The internal surfaces of the heated appliances and the base plates can become hot during use and cool down slowly in the air.

To adjust the base basket, allow the appliance to cool down sufficiently with the cover removed.

The adjustments of the base basket should only be carried out on the appliances, which are switched off, disconnected from the power supply and cooled down (room temperature).

It is necessary to adjust basket dispensers, if the total crockery weight stored in the basket or the basket height alters.



5.2.1 Spring Adjustment

ATTENTION

Damage to persons and property due to improper adjustment



If the level of the stack falls below the dispensing height, fingers may be injured if caught when removing dishes.

When the dispensing height is exceeded, there is a risk of accident or injury due to the crockery stack tipping and dishes breaking.

Be careful when taking the base basket out and putting it back in. If it is handled incorrectly, there is a risk of crushing your fingers.

When adjusting springs on sharp edges, pay particular attention to the ends of the tension springs. Proceed with care.

ATTENTION

Risk of injury



Be careful when attaching and detaching the springs.

Pay particular attention to the ends of the tension springs when adjusting springs on sharp edges.

The crockery or basket dispensing height must be adjusted to the height of baskets used and weight of filled baskets before loading completely the appliance. The dispensing height is adjusted by attaching or detaching tension springs.

The springs must be adjusted so that the upper rim of the uppermost basket remains at a uniform dispensing height between 1.3 and 1.9 " (35 and 50 mm) above the upper rim of the housing over the entire lift

Step 1: Checking the spring adjustment

- Place two filled crockery baskets on to the loaded base basket to test the dispensing height.
- Wait for the system to self-adjust.

If the upper edge of the uppermost basket is between 35 mm (1.3") and 50 mm (1.9") above the upper edge of the housing, the spring system is adjusted correctly.

If the column drops down only a little or not at all, the dispensing height must be altered by adjusting the springs.

Step 2: Changing the spring adjustment

The dispensing height is adjusted or changed by attaching or detaching tension springs on the 2 attachment bars.

The springs in the 50-50 basket dispensers are arranged in groups of 6, where 4 are base springs with higher tension (1) and 2 are adjustable springs (2) with lower tension.

The springs in the 65-53 basket dispensers are arranged in groups of 8, where 6 are base springs with higher tension (1) and 2 are adjustable springs (2) with lower tension.

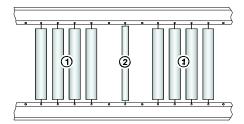


Figure 12 Attachment bar with tension springs

If the dispensing height is too high, adjustable springs must be detached.

If the dispensing height is too low, adjustable springs must be added.



Procedure for setting the springs:

- Take out the inserted crockery items and crockery baskets (if available).
- Lift the base basket uniformly and place it down on the appliance. Finally, put it down in a suitable
 place.
- Attach or detach adjustable springs evenly in all groups of springs.
- It is best to detach the adjustable springs. Always leave the base springs inserted, if possible. Always
 detach the springs on the lower attachment bar.
- Finally, insert the base basket back with the basket opening facing upwards.

So long as the same kind of crockery is always used, the dispensing height only needs to be set once.

NOTE	Arrangement of the springs
	A symmetrical arrangement of springs between the attachment bars is necessary for guiding the base basket uniformly and without friction.
	A slightly asymmetrical arrangement of springs within an attachment bar does not pose a problem.
NOTE	Maximum load-bearing capacity
	Since all the basket dispensers are designed for a maximum load, the available spring system of the appliances is entirely sufficient for all usual market crockery items.
	If the existing spring sets are insufficient, additional springs must be added.

5.2.2 Choice of Crockery Baskets

ATTENTION

Risk of fire



Plastic crockery baskets produced by any manufacturer shall not be loaded into heated basket dispensers. The plastic can melt and catch fire.

Only use the crockery baskets available at HUPFER®in the heated basket dispensers.

ATTENTION

Damage to property



If the base basket (the bottommost crockery basket) is removed and inserted back with the basket opening facing downwards, the guide flaps in the basket corners can press into the base plate due to high crockery weight and cause damages or get damaged. As a result, the total capacity reduces too.

Ensure that the base basket is inserted with the basket opening facing upwards.

Every basket dispenser is provided with a base basket with a height of 6" (150 mm). The further crockery baskets can be placed on it.

Two different kinds of high baskets are available. What kind of baskets will be used for further stacking depends on the crockery that should be loaded into the crockery baskets.

In general, higher capacities are achieved with the 4.53" (115 mm) baskets. Covered crockery with portioned food and total height between 2.17" (55 mm) and 2.56" (65 mm) is an exception to this.



Kind of basket	Basket height	Useful height
Base basket	5.9" (150 mm)	5.7" (145 mm)
basket size 75	2.9" (75 mm)	2.7" (70 mm)
basket size 115	4.5" (115 mm)	4.3" (110 mm)

Number of usable crockery baskets

	2.9" crockery baskets	Protrusion in in (mm)	4.5" crockery baskets	Protrusion in in (mm)
With cover and heating	8	1.3-1.9 (35-50)	5	1.3-1.9 (35-50)
Without cover	9	4.3-5.9 (110-150)	6	4.9-5.9 (125-150)
With plastic cover without heating	9	4.3-5.9 (110-150)	6	4.9-5.9 (125-150)
With stainless steel cover without heating	9	4.3-5.9 (110-150)	6	4.9-5.9 (125-150)

A higher filling level is possible in appliances used with covers. Depending on the inherent stability of the items, they can be stacked as far as the lower rim of the cover.

If the crockery in the uppermost crockery basket should be warmed up to the required temperature when using the models heated with circulating air, it is necessary to use a cover. The uppermost crockery basket shall not protrude more that 2" (50 mm).

Even when using non-heated appliances, it is not permitted to stack crockery over the indicated height for security reasons.

5.2.3 Calculating the Basket Dispenser Capacity

The total capacity of a basket dispenser depends on the crockery items loaded and the number of crockery baskets.

All leading manufacturers provide the necessary data for calculating the intermediate stack height in the following way:

$$H_Z = \frac{(H_n - H_1)}{n-1}$$

H_Z: Intermediate stack height

H₁: Height of the first crockery item

H_n: Height of n crockery items

n: Number of crockery items

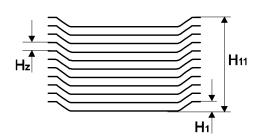


Figure 13

Intermediate stack height Hz for 11 crockery items

Example:

$$H_Z = \frac{(165 - 40)}{11 - 1} = 12,5 \text{ mm}$$
 $H_Z: Intermediate stack height$
 $H_1: Height of the first crockery item = 1.57" (40 mm)$
 $H_{11}: Height of 11 crockery items = 6.5" (165 mm)$

The capacity per crockery stack can be calculated together with the stack height H_S of the basket dispenser:

$$K = \frac{(H_S - H_1)}{H_Z} + 1$$

$$K: Capacity$$

$$H_S: Stack height of the basket$$

$$H_1: Height of the first crockery item$$

$$H_Z: Intermediate stack height$$

Example:

Capacity of 6" (150 mm) base basket:

$$K = \frac{(145 - 40)}{12.5} + 1 = 9.4$$

$$H_s = \text{Stack height of base basket} = 5.7" (145 \text{ mm})$$

$$H_1 = \text{Height of the first crockery item} = 1.57" (40 \text{ mm})$$

$$H_z: \text{Intermediate stack height} = 0.5" (12.5 \text{ mm})$$

The base basket can accommodate 9 crockery items placed upon each other per crockery stack. 6 crockery stacks fit into this crockery basket. Consequently, there can be loaded 54 items.

Capacity of 4.53" (115 mm) crockery basket:

$$K = \frac{(110 - 40)}{12.5} + 1 = 6.6$$

$$H_S = \text{Stack height of 4.5" (115 mm) crockery basket} = 4.3" (110 mm)$$

$$H_1 = \text{Height of the first crockery item} = 1.57" (40 mm)$$

$$H_2 : \text{Intermediate stack height} = 0.5" (12.5 mm)$$

A 4.5" (115 mm) crockery basket can accommodate 6 crockery items placed upon each other per crockery stack. 6 crockery stacks fit into this crockery basket. Consequently, there can be loaded 36 items.

Basket dispenser total capacity:

The total capacity is calculated from the capacity of the base basket plus the capacity of the inserted baskets.

Therefore, when six 4.5" (115 mm) baskets are used, the total capacity is 270 crockery items (54 items in the base basket and 6 x 36 items in 6 crockery baskets).



5.3 Operation

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

Before work starts, it is always necessary to check whether the basket dispenser is adjusted correctly for the crockery to be used.

- The correct dispensing height must be ensured, so that the staff cannot suffer injury or become trapped and no breakage of crockery can occur.
- The on/off switch must be accessible at all times.

5.3.1 Switching on the Appliance

DANGER

Hazardous electrical current



Electrical current can pose a considerable threat to life and physical well-being and may lead to injuries.

Only use the plug connection provided for this purpose. The appliance should not be operated if the connecting cable is damaged or any other damage is visible.

Any work on electrical installations should only be carried out by a qualified electrician, or by authorised specialists under the direction and supervision of a qualified electrician as per the applicable electro-technical regulations.

NOTE Heated appliances Some parts of this section relate exclusively to the heated appliances and do not apply to the non-heated models.

- Cover the stacking compartment with the cover to prevent heat loss.
- Insert the mains plug into a suitable socket.
- Switch on the appliance using the on/off switch. The indicator integrated into the switch will light up to show that the appliance is ready for use.
- Use the thermostat to set the required temperature. Continuous adjustment is possible within the 4 power ranges.

NOTE	Crockery temperature
	Depending upon the number and arrangement of crockery stacks, the temperature required for the crockery will be reached after 3 to 5 hours if the cover is in place and the initial temperature is at least 59 °F (15 °C).

5.3.2 Loading the Appliance

Loading crockery

ATTENTION

Breakage of crockery



The maximum loading height of the crockery baskets must be about 0.1" to 0.2" (3 to 5 mm) below the upper rim, otherwise this can cause breakage of crockery.

Do not stack the crockery items into the crockery baskets up to the upper edge of the crockery basket.

As a rule, the crockery shall be loaded into the baskets before the baskets are put into the appliance.

- Put the crockery items individually or in small stacks uniformly into the crockery basket.
- Put the further items precisely onto the items already placed in the crockery basket.



 In appliances without covers the maximum filling level is achieved when the tops of the crockery stacks are positioned approximately 0.2" (5 mm) above the upper edge of the crockery basket.

Unloading crockery

WARNING

Risk of burning



In heated appliances, crockery temperatures can exceed the maximum permitted temperatures of 65°C for touchable appliance surfaces.

Never reach into the appliance or touch the heating element with fingers during use.

Always wear protective gloves when dispensing hot crockery.

- Remove the cover and put it to one side.
- Remove the crockery items evenly from each stack to avoid tilting of the crockery baskets.
- Remove empty crockery baskets and stack them in a suitable place.
- Put the cover back on.

NOTE

Appliances with cooling slots

The appliances are designed to provide cooled crockery. The loaded appliances must be placed in a cold store for several hours for this purpose. The time that the crockery needs to cool depends on its initial temperature, the temperature in the cold store and the required crockery temperature. The appliances must always stand freely in the room, so that optimum air circulation is ensured thanks to free convection within and around the appliances.

NOTE

Use of the cover

The cover ensures effective protection against ingress of dust and condensation even during relatively long periods of temporary storage. Using the cover in the heated appliances minimises upward heat loss and reduces the time required to heat the inserted crockery or prolongs the time that pre-heated crockery takes to cool down. A gap between the cover and the top panel on the appliance can waste energy significantly due to heat loss, reduction in the maximum crockery temperature and, consequently, a longer heating time.

5.3.3 Moving the Appliance

Heated basket dispenser:

- Turn off the thermostat.
- Switch off the appliance with the on/off switch.
- Pull out the mains plug and insert it into the plug park provided.
- Release both total locks.
- Take hold of the push bars on the appliance and move the appliance to its destination.
- Once at its destination, apply both total locks, so the appliance isn't moved by accident.
- Insert the mains plug into a suitable earthed socket.
- Switch on the appliance using the on/off switch.
- Use the thermostat to set the required temperature.



Unheated basket dispenser:

- Release both total locks.
- Take hold of the push bars on the appliance and move the appliance to its destination.
- Once at its destination, apply both total locks, so the appliance isn't moved by accident.

5.4 Measures at the End of Use

WARNING

Hazard caused by hot surfaces



The internal surfaces and base plates of the heated appliances can become hot during operation and only cool down slowly in the air.

Allow the appliance to cool down sufficiently for cleaning with the cover removed; wear suitable protective gloves.

Heated basket dispenser:

- Once at its destination, apply both total locks, so the appliance isn't moved by accident.
- Turn off the thermostat.
- Switch off the appliance with the on/off switch.
- Pull out the mains plug and insert it into the plug park provided.

Unheated basket dispenser:

Once at its destination, apply both total locks, so the appliance isn't moved by accident.

Heated built-in appliances:

Switch off the appliance with the on/off switch.



6 Troubleshooting and Repair

6.1 Safety Measures

DANGER

Hazardous electrical current



Electrical current can pose a considerable threat to life and physical well-being and may lead to injuries.

Switch off the appliance at the mains before examining the appliance for faults. Pull out the mains plug and insert it into the plug park provided.

WARNING

Hazard caused by hot surfaces



The internal surfaces of a heated appliance and the base plates can become hot during operation and only cool down slowly in the air.

In the event of a malfunction, allow the appliance to cool down with the cover removed; wear suitable protective gloves.

ATTENTION

Exposed springs



If the stacking platform is pressed down by hand, the springs are exposed. Reaching into the gaps of the exposed springs may cause hand injuries.

Never press the stacking platform down by hand.

Be careful when attaching and detaching the springs. Pay particular attention to the ends of the tension springs when adjusting springs on sharp edges.

6.2 Instructions regarding Fault Repair

Please check first whether there is an operating fault. You can repair some faults yourself.

Servicing should be carried out by authorised specialists only. Indicate the information given on the rating plate if you contact the after-sales service or order spare parts.

Only use original spare parts to replace defective components.

Regular inspection and maintenance of the appliance prevent disruptions to operations and ensure safety. Inspection and maintenance intervals depend on the use of the appliance. Consult your dealer's after-sales service department.

6.3 Fault and Action Table

Fault	Possible cause	Action
Appliance does not become warm; indicator light is on.	Defective heating	Take the appliance out of operation and have it checked and repaired by authorised specialist staff if necessary.
Appliance does not become warm; indicator light does not come on.	Defective building fuses.	Check fuse and repair if necessary.
Appliance does not become warm; indicator light does not come on.	Defective on/off switch.	Switch off the appliance at the mains by pulling the mains plug and have it checked and repaired by authorised specialist staff if necessary.



Fault	Possible cause	Action
Appliance does not become warm; indicator light does not come on.	Defective connecting cable or mains plug	Switch off the appliance at the mains by pulling out the mains plug and have it checked and repaired by authorised specialist staff if necessary.
Appliance becomes warm; indicator light does not come on.	Defective indicator light.	Take the appliance out of operation and have it checked and repaired by authorised specialist staff if necessary.
Appliance becomes warm; indicator light does not come on.	Defective circuit.	Take the appliance out of operation and have it checked and repaired by authorised specialist staff if necessary.
Stacking platform does not move plates upwards to the dispensing height even with a low load.	Spring broken	Replace defective springs with new ones.
Total locks no longer brake.	Total locks have worn down	Either replace the locking brakes or replace the defective casters.



7 Cleaning and Care

7.1 Safety Measures

DANGER

Hazardous electrical current



Electrical current can pose a considerable threat to life and physical well-being and may lead to injuries.

Before cleaning, switch off the appliance at the mains. Pull out the mains plug and insert it into the plug park provided.

WARNING

Hazard caused by hot surfaces



The internal surfaces of the heated appliances and the base plates can become hot during operation and only cool down slowly in the air.

Allow the appliance to cool down sufficiently for cleaning with the cover removed; wear suitable protective gloves.

ATTENTION

Exposed springs



If the stacking platform is pressed down by hand, the springs are exposed. Reaching into the gaps of the exposed springs may cause hand injuries.

Never press the stacking platform down by hand.

Be careful when attaching and detaching the springs. Pay particular attention to the ends of the tension springs when adjusting springs on sharp edges.

ATTENTION

Do not clean with running water



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 steam-jet or high-pressure cleaners are to be used.

7.2 Hygiene Measures

It is essential for serving staff to act in the correct manner to ensure optimal hygiene.

Everyone must be informed about local applicable 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.

7.3 Cleaning and Care

The appliance must be cleaned dry daily or wiped with a damp cloth. Dry the appliance thoroughly after cleaning with damp materials to prevent mould forming, germs and bacteria spreading unchecked and, consequently, crockery from being contaminated.

The base outlet located under the stacking compartment is installed to remove broken crockery or other objects which have accidentally fallen into the appliance

The plastic covers can be cleaned by hand with a damp cloth. Covers can also be cleaned in a commercial dishwasher if they are heavily stained. Washing and rinsing agents suitable for polycarbonate should be used.



Clean the stainless steel covers by hand with a damp cloth. Let them dry thoroughly afterwards.

7.4 Special Care Instructions

Resistance to corrosion in stainless steels 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.
- Remove all cleaning agent residues by wiping thoroughly with plenty of water each time that you clean. The surface should be thoroughly dried after wiping.
- Do not bring parts 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. You must therefore 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 Introduction

Servicing should be carried out by authorised specialists only.

Only use original spare parts to replace defective components.

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

8.2 Spare Parts and Accessories List

KO/50-50 | KO/50-50K

0116722	Lid	angular shaped for basket dispenser 50/50 stainless st	
0119672	Cover	PP 555/555/180/4 gr - ET	
014000401	Swivel caster	$\ensuremath{\mathcal{Q}}$ 4.92" (125), plate, ball bearings, plastic	
014000402	Swivel caster	Ø 4.92" (125) with brakes, plate, ball bearings, plastic	
0191010963	Push bar	PP 192/180/30 black	
014002110	Corner bumpers	complete set	(package contains 4 units)
014003210	Cage nut	M 5 M5-R-083-11 set	(package contains 10 units)
014003211	Mushroom-head screw	M 5 x 10 A2 set	(package contains 10 units)
014004104	Tension spring	1 set galvanised 20gr Ø2/Ø25/146	Working length 730 mm (Package contains 5 units)
014040101	Tension spring	Stainless steel, 10gr, Ø1.5/Ø20/146 set	Working length 730 mm (Package contains 5 units)
014041030	Guide roller	Ø0.9" (24mm) for guide basket	(package contains 8 units)
014118000	Guide basket	Stainless steel 519/519/148-ET	Plastic-coated, silver-grey

KOUH/50-50

14041071	Cover	PPC 710/590/180/4 gr - ET	
014000401	Swivel caster	Ø 4.9" (125), plate, ball bearings, plastic	
014000402	Swivel caster	\varnothing 4.9" (125) with brakes, plate, ball bearings, plastic	
0191010963	Push bar	PP 192/180/30 black	
014001081	Spiral cable	3G1,0/1600 WS-DE FH	
014001089	Threaded nut	1 set M 63 x 1.5 plastic	
014001300	On/off switch	with frame & splash guard	
014002110	Corner bumpers	complete set	(package contains 4 units)
014002118	Thermostat toggle switch		
014002170	Switch module	for thermostat with protection against torsion	(Package contents: 1 piece)
014002951	O-rings	1 set Ø 63 x Ø 2.0 for switch plate	(Package contents: 10 piece)



014040011-01	Thermostat	30-115°C - ET	
014003210	Cage nut	M 5 M5-R-083-11 set	(package contains 10 units)
014003211	Mushroom-head screw	M 5 x 10 A2 set	(package contains 10 units)
014004104	Tension spring	1 set galvanised 20gr Ø2/Ø25/146	Working length 730 mm (Package contains 5 units)
014040101	Tension spring	Stainless steel, 10gr, Ø1.5/Ø20/146 set	Working length 730 mm (Package contains 5 units)
014041030	Guide roller	Ø 0.9" (24mm) for guide basket	(package contains 8 units)
014118000	Guide basket	Stainless steel 519/519/148-ET	Plastic-coated, silver-grey

KO/65-53 | KO/65-53K

0116722	Lid	angular shaped for basket dispenser 50/50 stainless st	
0119672	Cover	PP 555/555/180/4 gr - ET	
014000401	Swivel caster	Ø 4.9" (125), plate, ball bearings, plastic	
014000402	Swivel caster	Ø 4.9" (125) with brakes, plate, ball bearings, plastic	
0191010963	Push bar	PP 192/180/30 black	
014002110	Corner bumpers	complete set	(package contains 4 units)
014003211	Mushroom-head screw	M 5 x 10 A2 set	(package contains 10 units)
014004104	Tension spring	1 set galvanised 20gr Ø2/Ø25/146	Working length 730 mm (Package contains 5 units)
014040101	Tension spring	Stainless steel, 10gr, Ø1.5/Ø20/146 set	Working length 730 mm (Package contains 5 units)
014041030	Guide roller	Ø 0.9" (24mm) for guide basket	(package contains 8 units)
014118000	Guide basket	Stainless steel 519/519/148-ET	Plastic-coated, silver-grey

KOUH/65-53

14041071	Cover	PPC 710/590/180/4 gr - ET	
014000401	Swivel caster	Ø 4.9" (125), plate, ball bearings, plastic	
014000402	Swivel caster	Ø 4.9" (125) with brakes, plate, ball bearings, plastic	
0191010963	Push bar	PP 192/180/30 black	
014001081	Spiral cable	3G1,0/1600 WS-DE FH	
014001089	Threaded nut	1 set M 63 x 1.5 plastic	
014001300	On/off switch	w. frame, spray h.	
014002110	Corner bumpers	complete set	(package contains 4 units)
014002118	Thermostat toggle switch		
014002170	Switch module	for thermostat with protection against torsion	(Package: 1 piece)
014002951	O-rings	1 set Ø 63 x Ø 2.0 for switch plate	(Package: 10 piece)
014040011-01	Thermostat	30-115°C - ET	
014003210	Cage nut	M 5 M5-R-083-11 set	(package contains 10 units)



014003211	Mushroom-head screw	M 5 x 10 A2 set	(package contains 10 units)
014004104	Tension spring	1 set galvanised 20gr Ø2/Ø25/146	Working length 730 mm (Package contains 5 units)
014040101	Tension spring	Stainless steel, 10gr, Ø1.5/Ø20/146 set	Working length 730 mm (Package contains 5 units)
014041030	Guide roller	Ø 0.9" (24mm) for guide basket	(package contains 8 units)
014118000	Guide basket	Stainless steel 519/519/148-ET	Plastic-coated, silver-grey

EBS/50-50 | EBS-T/50-50

0116722	Lid	angular shaped for basket dispenser 50/50 stainless st	
0119672	Cover	PP 555/555/180/4 gr - ET	
014004104	Tension spring	1 set galvanised 20gr Ø2/Ø25/146	Working length 730 mm (Package contains 5 units)
014040101	Tension spring	Stainless steel, 10gr, Ø1.5/Ø20/146 set	Working length 730 mm (Package contains 5 units)
014041030	Guide roller	Guide roller (Ø24mm) for guide basket	(package contains 8 units)
014118000	Guide basket	Guide basket stainless steel 519/519/148-ET	Plastic-coated, silver-grey

EBSH/50-50 | EBSH-T/50-50

0116722	Lid	angular shaped for basket dispenser 50/50 stainless st	
0119672	Cover	PP 555/555/180/4 gr - ET	
014004104	Tension spring	1 set galvanised 20gr Ø2/Ø25/146	Working length 730 mm (Package contains 5 units)
014040101	Tension spring	Stainless steel, 10gr, Ø1.5/Ø20/146 set	Working length 730 mm (Package contains 5 units)
014041030	Guide roller	Guide roller (Ø24mm) for guide basket	(package contains 8 units)
014118000	Guide basket	Guide basket stainless steel 519/519/148-ET	Plastic-coated, silver-grey
14128901	Connecting cable set	EBRH	Connecting lead with switch, complete

The following types of plug can be used with the basket dispensers:

- 2-pole Schuko angle plug (standard)
- 3-pole CEE plug



9 Annex

9.1 **EC** Declaration of Conformity

CE Konformitätserklärung Declaration of CE-Conformity | Déclaration de conformité CE

Gegenstand | Object | Objet

Geschirrstapler, Korbstapler, Bühnenst. | crockery dispenser, basket dispenser, platform dispenser | chariot niveau constant à vaiselle, chariot niveau constant à paniers, chariot niveau constant à plateforme

Typ | Type | Type UST / KO / EBS / BD / BDK / OBK / BPN

Es wird bescheinigt, dass das/die zuvor näher beschriebene/n Produkt/e der/den im Folgenden aufgelisteten EU-Richtlinie/n entspricht/entsprechen:

Darüber hinaus wurden folgende harmonisierte Normen angewandt: EN ISO 12100:2010, EN ISO 13857

It is certified that the product/s described in detail before, conform/s to the requirements of the European Union directive/s listed in the following: 2006/42/EC

Furthermore, the following harmonised standards have been applied: EN ISO 12100:2010, EN ISO 13857

Il est certifié que le/s produit/s décrit/s en détail ci-dessus, correspond/ent aux directive/s de l'UE énuméré/es dans ce qui suit:

2006/42/CE

En outre, les normes harmonisées suivantes ont été appliquées: EN ISO 12100:2010, EN ISO 13857

Coesfeld, 12.06.2013

Helmut Schumacher Geschäftsführung

Vorname, Nachname Position Unterschrift

Jürgen Gottwald Leiter Normenstelle

Vorname, Nachname Position Unterschrift

Dokumentationsbevollmächtigter HUPFER® Metallwerke info@hupfer.de Jürgen Gottwald GmbH & Co. KG

Diese Konformitätserklärung ist eine original Konformitätserklärung in deutscher Sprache und kann gleichlautende Übersetzungen in weiteren EU-Sprachen enthalten. This declaration of conformity is an original declaration of conformity in the German language and can contain identical translations in the other EU languages. Cette déclaration de conformité est une déclaration de conformité originale en langue allemande et peut contenir des traductions conformes en d'autres langues de l'UE.

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CE Konformitätserklärung

Declaration of CE-Conformity | Déclaration de conformité CE

Gegenstand | Object | Objet

Geschirrstapler, Korbstapler, Bühnenst. elektr. | crockery dispenser, basket dispenser, platform dispenser electr. | chariot niveau constant à vaiselle, chariot niveau constant à paniers, chariot niveau constant à plateforme, électr.

Typ | Type | Type USTH / EUSTH / KOUH / EBSH / BDC / BDUH

Es wird bescheinigt, dass das/die zuvor n\u00e4her beschriebene/n Produkt/e der/den im Folgenden aufgelisteten EU-Richtlinie/n entspricht/entsprechen: 2006/42/EG, 2006/95/EG, 2004/108/EG

Darüber hinaus wurden folgende harmonisierte Normen angewandt: EN ISO 12100:2010, EN ISO 13857, EN 60204-1:2006, EN 60335-1, EN 61000-6-2, EN 61000-6-4 Im Übrigen wird bescheinigt, dass das/die Produkt/e weder Störungsquellen noch störungsanfällige Bauteile im Sinne der EMV-Richtlinie enthält/enthalten.

It is certified that the product/s described in detail before, conform/s to the requirements of the European Union directive/s listed in the following:

2006/42/EC, 2006/95/EC, 2004/108/EC

Furthermore, the following harmonised standards have been applied: EN ISO 12100:2010, EN ISO 13857, EN 60204-1:2006, EN 60335-1, EN 61000-6-2, EN 61000-6-4 Incidentally, it is certified that the product's contain's neither sources of disturbance nor components liable to disturbances according to the EMC directive.

Il est certifié que le/s produit/s décrit/s en détail ci-dessus, correspondient aux directive/s de l'UE énuméré/es dans ce qui suit:

2006/42/CE, 2006/95/CE, 2004/108/CE

En outre, les normes harmonisées suivantes ont été appliquées:

EN ISO 12100:2010, EN ISO 13857, EN 60204-1:2006, EN 60335-1, EN 61000-6-2, EN 61000-6-4
Il est certifié aussi, que le/s produit/s ne contient/contiennent ni des sources de perturbation ni
des éléments de construction exposés à des perturbations correspondant aux directives de
l'AECM.

Coesfeld, 12.06.2013

Helmut Schumacher Vorname, Nachname Geschäftsführung

Unterschrift

Jürgen Gottwald Vorname, Nachname Leiter Normenstelle

Unterschrift

Dokumentationsbevollmächtigter

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