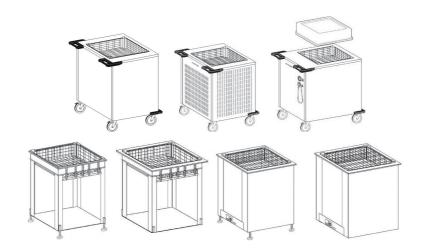


Operating Instructions



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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 designation 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

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Read these operating instructions carefully before the first operation of the appliance.

Ensure that sources of danger and possible faulty operations have been pointed out to the operating staff.

Subject to modifications

The products covered by these operating instructions have been developed taking into consideration the requirements of the market and the latest technology. HUPFER® reserves the right to modify the products and appertaining technical documentation in so far 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.

Manual edition

4330007 A0



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1.3 List of Abbreviations

Abbreviation	Definition		
CE	Communauté Européenne European Community		
DIN	Deutsches Institut für Normung		
	German Institute for Standardisation, technic	cal regulations and technical specifications	
EC	European Community European Union		
EN	European Standard		
	Harmonised standard for the EU market		
E/V	Spare and wearing part		
IP	International Protection. The abbreviation IP protection class of a housing.	and a further two-digit index specify the	
	The first digit: Protection against ingress of solid foreign ob water	jects The second digit: Protection against ingress of	
	No protection against contact, no protection against ingress of solid foreign objects	0 No protection against ingress of water	
	 Protection against contact with any large surface of the body such as the hand, protection against ingress of foreign objects Ø >1.97" (50 mm) 	Vertically falling drops shall have no harmful effects	
	Protection against contact with the fingers, protection against ingress of foreign objects Ø >0.47" (12 mm)	Vertically falling drops shall have no harmful effects, when the housing is tilted at any angle up to 15° on either side of the vertical	
	3 Protection against contact with tools, thick wires or similar objects of Ø >0.1" (2,5 mm), protection against foreign objects Ø >0.1" (2,5 mm)	Water striking the appliance at any angle up to 60° either side of the vertical shall have no harmful effects	
	 4 Protection against contact with tools, thick wires or similar objects of Ø >0.04" (1 mm), protection against foreign objects Ø >0.04" (1 mm) 	Water splashing against the housing from any direction shall have no harmful effects	
	5 Protection against contact, protection against dust deposits inside	5 Water striking against the housing from any direction shall have no harmful effects	
	6 Complete protection against contact, protection against ingress of dust	6 Water which is sprayed as a strong jet against the housing from any direction shall have no harmful effects	
		Water shall not penetrate to an extent that will cause harmful effects if the housing is temporarily submerged in water under determined pressure and time conditions	
		8 Water shall not penetrate to an extent that will cause harmful effects if the housing is permanently submerged in water under determined conditions	
LED	Light Emitting Diode Light diode		
UVV	Accident Prevention Regulations Directives on health and safety at work issued by the professional association of the Federal Republic of Germany		



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.
Cook&Chill-Kitchens	"Cook and Chill": Kitchens where warm food after being cooked is chilled as quickly as possible.
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, as for example water or even air humidity.
Specialist	A specialist is a person who can evaluate work assigned and can individually recognise any possible dangers due to the professional training, specialist knowledge and experience as well as knowledge of the respective guidelines.
Lift	A movement, for example a vertical movement of the stacking platform from bottom to top.
Control	Compare with certain conditions and/or characteristics such as damages, leaks, filling levels, 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.
Machine safety	The term of machine safety means all the measures used to avert injury to persons. The basis for this are national as well as EC-wide valid directives and laws for protecting users of technical devices and systems.
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, temperature.
Qualified person, qualified staff	Qualified personnel are persons who due to their professional training, experience and instruction as well as their knowledge of the respective 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 possible danger (definition of specialists according to IEC 364).
Schuko®	The abbreviation of the German term "Protective contact" that 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 the assigned task as well as on the necessary protective equipment and protective measures and trained for this task if necessary.



1.5 Orientation Guide

The front

"The front" means 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 side named "the rear" means the opposite side of the front side (the front).

The right

The side named "the right" means the side at the right hand side of the front side (the front).

The left

The side named "the left" means the side at the left hand side of the front side (the front).



1.6 Notes on Use of Manual

1.6.1 Notes on Manual Structure

This manual is structured in functional and task orientated chapters.

1.6.2 Notes and Their Illustrations Used in Chapters

DANGER

Brief description of danger



There is an imminent danger to life and limb of the user and / or third parties when 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. In this example the general sign of danger is used.

WARNING

Brief description of danger



There is an indirect danger to life and limb of the user and / or third parties when 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. In this example the general sign of danger is used.

ATTENTION

Brief description of danger



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

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

NOTE

Brief description of additional information

Attention is pointed to special conditions or additional important information on the respective subject.

INFO

Short title

Contains additional information on work assisting features or recommendations on the respective subject.



2 Safety Instructions

2.1 Introduction

The chapter 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 point out the dangers that can occur while operating or cleaning the appliance. In both cases, the symbol provides information on the type and circumstances of danger.

The following symbols can be used:



General hazardous area



Hazardous electrical voltage



Risk of hand injuries



Risk of squashing



Risk of hot surfaces



Wear hand protection

2.3 Safety Instructions for Appliance Safety

Safe operation of the appliance depends on appropriate and thorough use. Negligent handling of the appliance can lead to danger to life and limb of the user and / or third parties as well as hazards to the appliance itself and the other operator's 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 the operating and actuating elements must be in a perfect and functionally reliable condition with regards to technical standards.
- Modifications or retrofits of the equipment are only permitted in consultation with the manufacturer and on receipt of his written agreement.
- In no case may people sit or stand on the appliance. 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 provided exclusively for manual transport. Mechanical transport is not permitted. Risk of injury and damage.
- Release both total brakes before commencing transporting. Moving the appliance with the total brakes locked can damage the chassis
- Transport should only be undertaken over level floors. Moving the appliance over very uneven floors can damage the chassis.
- Transport over inclined planes or steps is not permitted.
- When approaching walls and moving round obstacles always pay attention to persons in the way.
 Risk of injury.
- When transporting the appliance, always hold both handles with your hands. Never let go of the appliance while moving it.
- When transporting the appliance, do not move it faster than a walking pace. 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 stop the appliance on sloping floors.
- After stopping, the appliance should be secured against rolling away by means of both total brakes being applied.
- In the case of off-site transport in a vehicle such as a lorry, the appliances should be secured properly. The total brakes 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. Their use for cooking food and keeping it warm or for room heating is not permitted.
- The crockery temperatures can exceed the permitted maximum temperatures of 149°F (65°C) for touchable appliance surfaces. Always wear protective gloves when dispensing hot crockery. Risk of burning.
- During operation of the appliance, never reach into it and touch the heating element with the fingers.
 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. Owing to the high temperatures of the heating elements, the plastics can melt and catch fire.
- 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 can heat up to over 150°F (65 °C). Therefore, only touch the cover with protective gloves to avoid skin irritations.
- 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 (e.g. carpets, mats).
- Before transporting, switch off the appliance, pull out the mains plug and insert 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. The standard models of HUPFER® appliances are equipped with a Schuko® angle plug. In contrast to a straight Schuko® plug this plug only sticks insignificantly out of the socket and so cannot be damaged by being hit at 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 reused.
- 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 washers. The appliance must be taken
 out of operation and switched off at the mains beforehand in any area where steam-jet or highpressure washers 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 shall be observed when carrying out any cleaning and maintenance operations:

- For reasons of hygiene the cleaning instructions shall be strictly observed.
- Take the appliance out of operation before starting the cleaning process. Pull out the mains plug and
 insert 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 washers. The appliance must be taken
 out of operation and switched off at the mains beforehand in any area where steam-jet or highpressure washers are to be used.
- Even appliances without an electrical connection should not be cleaned with running water or pressurised water.

2.5 Safety Instructions for Trouble Shooting

The following points shall be observed when carrying out any maintenance and trouble shooting operations:

- All trouble shooting work should only be carried out by authorised specialists.
- When carrying out trouble shooting work, it must be ensured that the appliance is switched off. When operating on the electrical installation, the appliance is to be switched off at the mains and secured against reactivation.
- The local applicable Accident Prevention Regulations must be observed.
- Defective components should only be replaced with original parts.

2.6 Notes on Specific Hazards

Electrical energy

- All work on the electrical installations should only be carried out by a certified electrician or by authorised specialists under supervision and monitoring of a certified electrician according to the certain electro-technical regulations.
- The appliances that inspection, maintenance and trouble shooting work is performed on must be switched voltage free on and secured against reactivation, when the voltage is not required for this kind of work. This must only be carried out by a certified 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 unheated models with the enclosed side and front walls of the housing store crockery items ready for use for serving portions of cold dishes.

The unheated 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 by air circulation 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 Intended 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 warmed when dispensing.

The appliances are intended for transporting round or square china items or crockery items made of toughened glass. Transport of other 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 unheated appliances without cooling slots.

The intended use means the predetermined procedures, compliance with the indicated specifications and use of the delivered or additionally available original accessories.

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

3.3 Improper Use

It is not permitted to load the basket dispenser with other loads as given.

In no case may people sit or stand on the appliance.

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

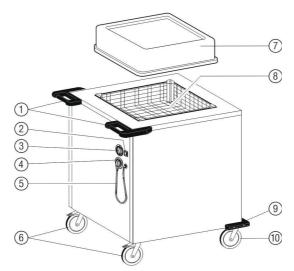


Figure 1 View of the appliance KOUH/50-50

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

3.4.2 Appliance Description

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

The base basket with a height of 5.91" (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 dispensing the crockery, the crockery baskets move up so that the crockery is always at hand resting at the required dispensing height.

Crockery baskets are available in two heights (2.95" (75 mm) and 4.53" (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 1/2" (115 mm) baskets.

Depending on the model, mobile basket dispensers are intended for various purposes.

KO/50-50 and KO/65-53 are unheated and without a cooling device. 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 unheated, however, particularly suitable for use 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 cause the cold air to be distributed uniformly inside.

The heated models KOUH/50-50 and KOUH/65-53 are used mainly to stack, heat up and store crockery items ready for use for serving portions of warm components on food distribution belts.

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 arranged on 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 condensed water 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 (2"-2"), grey, height 6.7" (170 mm), usable internal height for crockery baskets is 5.9" (150 mm) *
- Plastic cover 65-53 (2.6"-2.1"), grey, height 6.7" (170 mm), usable internal height for crockery baskets is 5.9" (150 mm) **
- Stainless steel cover 50-50 (2"-2"), single-walled, height 5.12" (130 mm), usable internal height for crockery baskets is 4.5" (114 mm)
- Stainless steel cover 65-53 (2.6"-2.1"), single-walled, height 5.12" (130 mm), usable internal height for crockery baskets is 4.5" (114 mm)
- Crockery baskets 19.7" x 19.7" x 3" (500 x 500 x 75 mm) or 19.7" x 19.7" x 4.5" (500 x 500 x 115 mm), plastic-coated stainless steel or electro polished stainless steel, with corner flaps
- Crockery baskets 25.6" x 20.8" x 3" (650 x 530 x 75 mm) or 25.6" x 20.8" x 4.5" (650 x 530 x 115 mm), plastic-coated stainless steel or electro polished stainless steel, with corner flaps
- Peripheral bumper strip made of impact-resistant plastic
- Swivel casters made of stainless steel, Ø = 4.92" (125 mm) with and without total brakes, plate attachment
- * Standard in KOUH/50-50, EBSH/50-50 and EBSH-T/50-50

The part numbers of the special accessories can be found in the spare parts catalogue and order lists available online.



^{**}Standard in KOUH/65-53

3.5 Technical Data

	Dim.	KO/50-50	KO/50-50K	KO/65-53	KO/65-53K
		Basket dispenser, unheated and with- out cooling device	Basket dispenser, unheated and with cooling device	Basket dispenser, unheated and with- out cooling device	Basket dispenser, unheated and with cooling device
Own weight	kg (lbs)	42 (92.6)	42 (92.6)	46 (101.4)	46 (101.4)
Payload	kg (lbs)	158 (348.3)	158 (348.3)	154 (339.5)	154 (339.5)
Permitted total weight	kg (lbs)	200 (441)	200 (441)	200 (441)	200 (441)
Overall dimen- sions w x d x h	mm (in)	760 x 712 x 900 (29.92" x 28.03" x 35.43")	760 x 712 x 900 (29.92" x 28.03" x 35.43")	760 x 852 x 900 (29.92" x 33.54" x 35.43")	760 x 852 x 900 (29.92" x 33.54" x 35.43")
Operating and ambient conditions	°C (°F)	-20 to +50 (-4 to +122)	-20 to +50 (-4 to +122)	-20 to +50 (-4 to +122)	-20 to +50 (-4 to +122)
Chassis	mm (in)	4 swivel casters, 2 with total brakes, ⊘125 (4.92")	4 swivel casters, 2 with total brakes, ⊘125 (4.92")	4 swivel casters, 2 with total brakes, ⊘125 (4.92")	4 swivel casters, 2 with total brakes, ⊘125 (4.92")
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	mm (in)	500x500x150 (19.7" x 19.7" x 5.9")	500x500x150 (19.7" x 19.7" x 5.9")	650x530x150 (25.6" x 20.8" x 5.9")	650x530x150 (25.6" x 20.8" x 5.9")
Dimensions of usable crockery baskets	mm (in)	500 x 500 x 75 (19.7" x 19.7" x 3") 500 x 500 x 115 (19.7" x 19.7" x 4.5") 508 x 508 (20" x 20")	500 x 500 x 75 (19.7" x 19.7" x 3") 500 x 500 x 115 (19.7" x 19.7" x 4.5") 508 x 508 (20" x 20")	650 x 530 x 75 (25.6" x 20.8" x 3") 650 x 530 x 115 (25.6" x 20.8" x 4.5")	650 x 530 x 75 (25.6" x 20.8" x 3") 650 x 530 x 115 (25.6" x 20.8" x 4.5")
Capacity		additionally 6 bas- kets 155 mm (6") high or 9 baskets 75 mm (3") high	additionally 6 bas- kets 155 mm (6") high or 9 baskets 75 mm (3") high	additionally 6 bas- kets 155 mm (6") high or 9 baskets 75 mm (3") high	additionally 6 bas- kets 155 mm (6") high or 9 baskets 75 mm (3") 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 cro- ckery stacks		depending on cro- ckery size	depending on cro- ckery size	depending on cro- ckery size	depending on cro- ckery size



Dim.		KOUH/50-50	KOUH/65-53
		Basket dispenser, heated by air circulation	Basket dispenser, heated by air circulation
Own weight	kg (lbs)	62 (136.7)	69 (152.1)
Payload	kg (lbs)	138 (304.2)	131 (288.8)
Permitted total weight	kg (lbs)	200 (441)	200 (441)
Overall dimensions w x d x h	mm (in)	760 x 852 x 900 (29.92" x 33.54" x 35.43")	760 x 992 x 900 (29.92" x 39.1" x 35.43")
Operating and ambi- ent conditions	°C (°F)	-20 to +50 (-4 to +122)	-20 to +50 (-4 to +122)
Chassis	mm (in)	4 swivel casters, 2 with total brakes, Ø125 (4.92")	4 swivel casters, 2 with total brakes, Ø125 (4.92")
Stacking platform		Plastic-coated, stainless steel basket	Plastic-coated, stainless steel basket
Dimensions of base basket	mm (in)	500x500x150 (19.7" x 19.7" x 5.9")	650x530x150 (25.6" x 20.8" x 5.9")
Dimensions of usable crockery baskets	mm (in)	500 x 500 x 75 (19.7" x 19.7" x 3") 500 x 500 x 115 (19.7" x 19.7" x 4.5")	650 x 530 x 75 (25.6" x 20.8" x 3") 650 x 530 x 115 (25.6" x 20.8" x 4.5")
Capacity		additionally 6 baskets 155 mm (6") high or 9 baskets 75 mm (3") high	additionally 6 baskets 155 mm (6") high or 9 baskets 75 mm (3") 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
Power requirement	kW	2,0	2,0
Length of connecting lead (spiral lead)	m (ft)	1,8 (5.9)	1,8 (5.9)
Protection class		IPX5	IPX5
Heating		Circulating air	Circulating air
Heat insulation		Mineral fibre mat	Mineral fibre mat
Thermostat setting	°C (°F)	30-115 (86-239)	30-115 (86-239)
Maximum crockery temperature	°C (°F)	80 (176)	80 (176)
Temperature regula- tion		continuous	continuous



		Dim. KOUH/50-50		KOUH/65-53	
		Built-in basket dis- penser, unheated	Basket dispenser for installation from above, unheated	Built-in basket dis- penser, heated	Basket dispenser for installation from above, heated
Own weight	kg (lbs)	15 (33)	18 (39.7)	55 (121.2)	55 (121.2)
Payload	kg (lbs)	120 (264.5)	120 (264.5)	120 (264.5)	120 (264.5)
Permitted total weight	kg (lbs)	135 (267.5)	138 (304.2)	175 (385.7)	175 (385.7)
Overall dimen- sions w x d x h	mm (in)	620 x 540 x 640 (24.4" x 21.26" x 25.2")	640 x 600 x 650 (25.2''x 23.6" x 25.6")	620 x 620 x 640 (24.4" x 24.4" x 25.2")	660 x 660 x 650 (26" x 26" x 25.6")
Worktop cut-out	mm (in)	526 x 526 (20.7" x 20.7")	610 x 566 (24"x 22.3")	526 x 526 (20.7" x 20.7")	630 x 630 (24.8'' x 24.8")
Operating and ambient conditions	°C (°F)	-20 to +50 (-4 to +122)			
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	mm (in)	500x500x150 (19.7'' x 19.7'' x 5.9")	500x500x150 (19.7" x 19.7" x 5.9")	500x500x150 (19.7'' x 19.7'' x 5.9'')	650x530x150 (25.6'' x 20.8" x 5.9")
Dimensions of usable crockery baskets	mm (in)	500 x 500 x 75 (19.7" x 19.7" x 3") 500 x 500 x 115 (19.7" x 19.7" x 4.5")	500 x 500 x 75 (19.7" x 19.7" x 3") 500 x 500 x 115 (19.7" x 19.7" x 4.5")	500 x 500 x 75 (19.7" x 19.7" x 3") 500 x 500 x 115 (19.7" x 19.7" x 4.5")	500 x 500 x 75 (19.7" x 19.7" x 3") 500 x 500 x 115 (19.7" x 19.7" x 4.5")
Crockery size		depending on bas- ket size and mesh width			
Number of crockery stacks		depending on cro- ckery size			
Electrical con- nection		-	-	230 V 1N AC 50 Hz	230 V 1N AC 50 Hz
Power require- ment	kW	-	-	2,0	2,0
Protection class		-	-	IPX5	IPX5
Heating		-	-	Power module (static)	Power module (static)
Heat insulation		-	-	-	-
Thermostat setting	°C (°F)	-	-	20-85 (68-185)	20-85 (68-185)
Maximum cro- ckery tempera- ture	°C (°F)	-	-	80 (176)	80 (176)
Temperature regulation		-	-	continuous	continuous

The corresponding test marks can be found on our home page at www.hupfer.de.



3.6 Rating Plate

The rating plate is on the rear of the appliance.

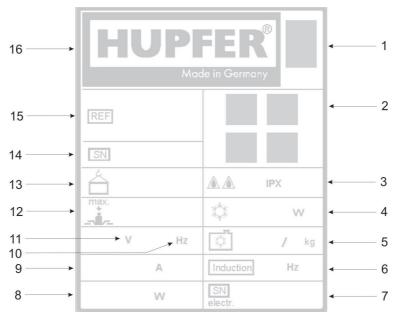


Figure 2 Rating plate

1	Disposal of old appliances	9	Nominal current
2	Test mark	10	Frequency
3	Protection class	11	Nominal voltage
4	Chilling capacity	12	Payload
5	Refrigerant	13	Own weight
6	Induction frequency	14	Serial number/Order number
7	Current serial number	15	Item and brief description
8	Power	16	Manufacturer

4 Transport, Assembly, Putting into Operation and Decommissioning

4.1 Transport

ATTENTION

Appliance damages caused by improper transport



In the case of off-site transport in a vehicle such as a lorry, the appliances should be secured properly. The total brakes are not sufficient as a transport securing method.

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

During transport, secure all the individually standing appliances using corresponding transport securing devices.

4.2 Assembly (Built-in appliances only)

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

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

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

4.2.1 Unheated 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).

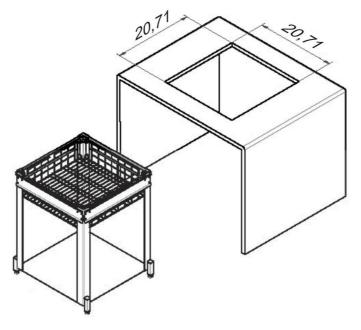


Figure 3 Worktop cut-out EBS/50-50



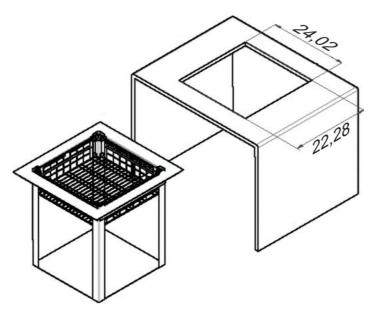


Figure 4 Worktop cut-out EBS-T/50-50

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 plates.

Step 2: Installation

EBS/50-50

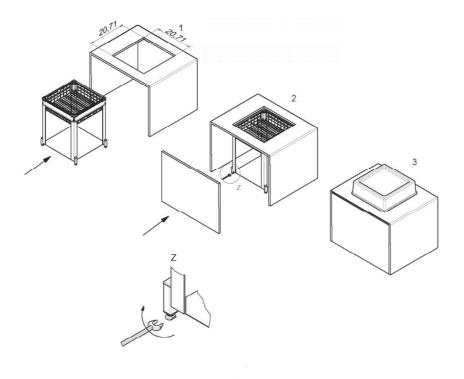


Figure 5 Assembly instructions EBS/50-50

- 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

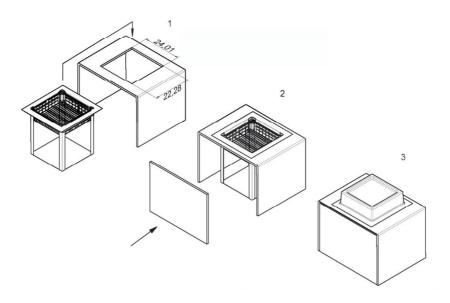


Figure 6 Assembly instructions EBS-T/50-50

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 voltage



The electrical voltage may be considerably dangerous to limb and life of persons and lead to injuries.

All work on the electrical installations should only be carried out by a certified electrician or by authorised specialists under supervision and monitoring of a certified electrician according to the certain electro-technical regulations.

ATTENTION

Risk of hot surfaces



The internal surfaces and base plates of the heated appliances can become hot during and/or after the operation. The heated appliances should not come into contact with light inflammable materials.

Ensure that there is enough space between the housing and cladding required for air circulation.

NOTE

Appliance location

The built-in appliances may only be put into operation after being retrofitted or built-in (e.g. in a cabinet).



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

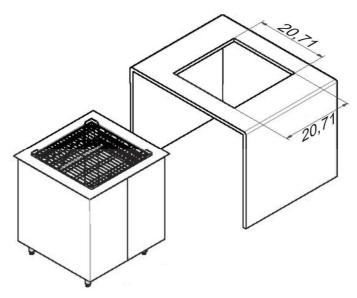


Figure 7 Worktop cut-out EBSH/50-50

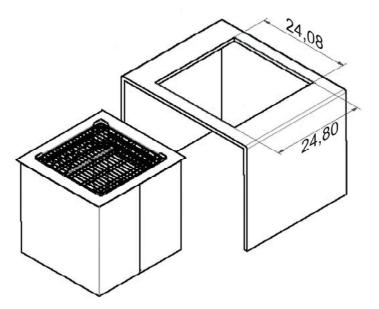


Figure 8 Worktop cut-out EBSH-T/50-50

Step 1: Preparation

- Prepare cut-outs in the worktop and the front cladding corresponding to the indicated dimensions. The worktop cut-out dimensions are given in mm as shown in the corresponding drawing of the built-in appliance. The cut-out dimension for the switch is 1.18" x 0.87" (30 x 22 mm).
- Remove the protective plastic film from the metal plates.



Step 2: Installation

NOTE	Presetting the operating temperature
	In contrast to the mobile appliances with the switch and controller arranged next to each other, the switch of the built-in appliance can be placed anywhere on the front side.
	Under these circumstances, the controller is no longer accessible for operating after the installation. Ensure that the desired temperature is set on the thermostat before the installation.

EBSH/50-50

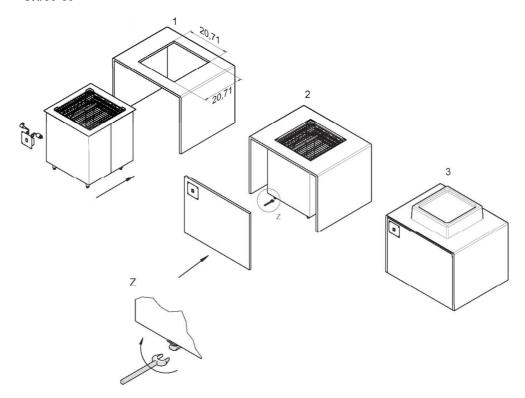


Figure 9 Assembly instructions EBSH/50-50

- Adjust the height-adjustable screw feet so that the appliance can be positioned under the worktop.
- Position the appliance exactly under the 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

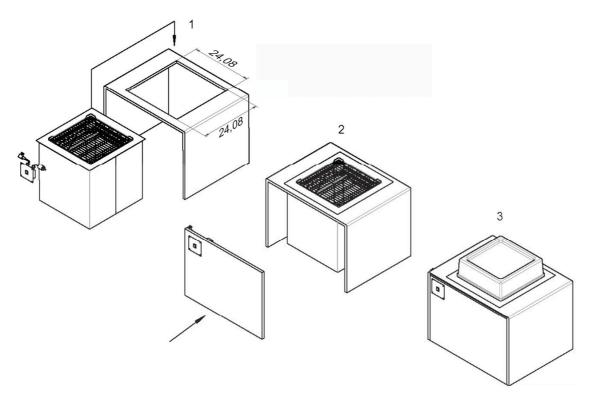


Figure 10 Assembly instructions EBSH-T/50-50

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

Step 3: Connect

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 ready to be put into operation.



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 plates.

INFO	Disposal of packing material
	The packing consists of recyclable materials and can be disposed of appropriately. Thereby, the different materials are to be separated and disposed in an environmentally compatible manner. In any case, the local bodies responsible for disposal are to be involved for this purpose.

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

The following functions are to be checked separately:

- In the mobile appliances: Function of the total brakes.
- In the heated appliances: Function of the operating elements and heating.

Before the appliance is put into operation it must be clean and dry.

4.4 Storage and Recycling

Temporary storage must take place in a dry and frost-free environment. 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 Condensed water formation	
	Ensure that there is sufficient ventilation and no large temperature fluctuations in the storage location to avoid condensed water formation.

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

If the basket dispenser is required to be recycled, all the heating devices (if available) must be removed safely and completely, the recyclable materials must be separated properly and disposed in an environmentally compatible manner according to the Waste Disposal Regulations. In any case, the local bodies responsible for disposal are to be involved for this purpose.



5 Operation

5.1 Arrangement and Function of the Operating Elements

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

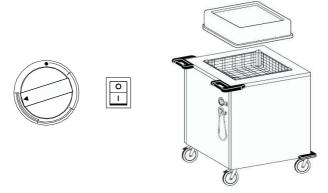


Figure 11 Operating elements

The desired temperature can be set on the thermostat. A 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 be operated.

5.2 Adjustment of Basket Dispenser

WARNING

Risk of 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.

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 falls below the dispensing height, crush injuries to fingers can be caused when removing dishes.

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

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. Act carefully.

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 hooking or unhooking tension springs.

The springs must be adjusted so that the upper edge of the uppermost basket remains at a uniform dispensing height between 1.38" (35 mm) and 1.97" (50 mm) above the upper edge 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 a reaction.

If the upper edge of the uppermost basket is between 1.38" (35 mm) and 1.97" (50 mm) 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: Altering the spring adjustment

The dispensing height is adjusted by hooking or unhooking tension springs on two 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.

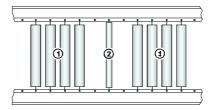


Figure 12 Attachment bar with tension springs

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

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.
- Hook or unhook adjustable springs uniformly in all groups of springs.
- Preferably unhook the adjustable springs. Always leave the base springs inserted, if possible. Always unhook 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 any problem.
NOTE	Maximum load-bearing capacity
	Since all 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 ${\sf HUPFER}^{\it @}$ 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 5.91" (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 1/2" (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	150 mm (5.91'')	145 mm (5.71)
3" (75er) basket	75 mm (3'')	70 mm (2.76'')
4 1/2" (115er) basket	115 mm (4.5")	110 mm (4.33")

Number of usable crockery baskets

	75er (3") crock- ery baskets	Protrusion in mm (in)	115er (4 1/2") crockery baskets	Protrusion in mm (in)
With cover and heating	8	35-50 (1.38"-1.97")	5	35-50 (1.38"-1.97")
Without cover	9	110-150 (4.33"-5.91")	6	125-150 (4.92''-5.91'')
With plastic cover without heating	9	110-150 (4.33"-5.91")	6	125-150 (4.92''-5.91'')
With stainless steel cover without heating	9	110-150 (4.33''-5.91'')	6	125-150 (4.92"-5.91")

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

If the crockery loaded in the uppermost crockery basket should be warmed up to the required temperature when using the models warmed by air circulation, it is necessary to use a cover. The uppermost crockery basket shall not protrude more that 1.97" (50 mm).

Even when using unheated 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 the leading manufacturers give the necessary data for calculating the intermediate stack height in the following manner:

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

 H_Z : Intermediate stack height H_1 : Height of the first crockery item H_n : Height of n crockery items

n: Number of crockery items

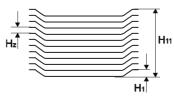


Figure 13 Intermediate stack height H_Z of 11 crockery items

Example:

$$H_Z = \frac{(6.5" -1.57")}{11-1} = 0.49" (12,5 mm)$$

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)

е

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

$$K = \frac{(H_S - H_1)}{H_2} + 1$$

K: Capacity

H_S: Stack height of the basket

H₁: Height of the first crockery item

Hz: Intermediate stack height

Example:

Capacity of 6" (150 mm) base basket:

$$K = \frac{(5.71^{\circ} - 1.57^{\circ})}{0.49^{\circ}} + 1 = 9,4$$

H_S = Stack height of base basket = 5.71" (145 mm)

H₁= Height of the first crockery item = 1.57" (40 mm)

H_z: Intermediate stack height = 0.49" (12,5 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 1/2" (115 mm) crockery basket:

$$K = \frac{(4.33"-1.57")}{0.49"} + 1 = 6.6$$

$$H_s = \text{Stack height of 4 1/2" (115 mm) crockery basket = 4.33"(110 mm)}$$

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

$$H_z: \text{Intermediate stack height = 0.49" (12,5 mm)}$$

A 4 1/2" (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 $4 \frac{1}{2}$ " (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

Before the appliance is put into operation it must be clean and dry.

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.

5.3.1 Switching On the Appliance

DANGER

Hazardous electrical voltage



The electrical voltage may be considerably dangerous to limb and life of persons and lead to injuries.

Only use the plug connection provided for this. The appliance should not be operated with a damaged connecting line or other visible damages.

All work on the electrical installations should only be carried out by a certified electrician or by authorised specialists under supervision and monitoring of a certified electrician according to the certain electro-technical regulations.

NOTE H

Heated appliances

Some parts of this section relate exclusively to the heated appliances and do not apply to the unheated models.

- Cover the stacking compartment with the cover to avoid heat loss.
- Insert the mains plug into a suitable socket.
- Switch on the appliance with the On / Off switch. The indicator integrated in the switch will light up to show that the appliance is ready for operation.
- Set the desired temperature using the thermostat. A continuous adjustment is possible within the 4 power ranges.

NOTE	Crockery temperature
	Depending upon the number and arrangement of crockery stacks, the required temperature of the crockery with the cover put on and an initial crockery temperature of at least 59 °F (15 °C) will be reached after 3 to 5 hours.



5.3.2 Loading the Appliance

Loading crockery

ATTENTION

Breakage of crockery



The maximum loading height of the crockery baskets must be about 0.12" (3 mm) to 0.2" (5 mm) below the upper edge, 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 the heated appliances the crockery temperatures can exceed the permitted maximum temperatures of 149°F (65 °C) for touchable appliance surfaces.

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

Always wear protective gloves when dispensing hot crockery.

- Remove the cover and put it down.
- 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 intended to provide cooled crockery. For this purpose, the loaded appliances must remain in cold stores for several hours. The duration of cooling depends on the initial crockery temperature, the temperature of the cold store and the desired crockery temperature. The appliances must always be free-standing in the room so that optimum air circulation is ensured by free convection within and around the appliances.

NOTE

Use of the cover

The cover ensures effective protection against ingress of dust and condensed water even during relatively long periods of temporary storage. Using the 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. Even a gap between the cover and the top plate of the appliance can lead to marked energy losses caused by heat loss, a reduction in the maximum crockery temperature and thus to 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 brakes.
- Grip the appliance by the push bars and move it to the destination.
- At the destination, apply both total brakes in order to secure the appliance against movement.
- Insert the mains plug into a suitable earthed socket.
- Switch on the appliance with the On / Off switch.
- Set the desired temperature using the thermostat.

Unheated basket dispenser:

- Release both total brakes.
- Grip the appliance by the push bars and move it to the destination.
- At the destination, apply both total brakes in order to secure the appliance against movement.

5.4 Measures at the End of the Operation

WARNING

Risk of 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.

For cleaning, allow the appliance to cool down sufficiently with the cover removed and wear suitable protective gloves.

Heated basket dispenser:

- At the destination, apply both total brakes in order to secure the appliance against movement.
- 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:

At the destination, apply both total brakes in order to secure the appliance against movement.

Heated built-in appliances:

Switch off the appliance with the On / Off switch.



6 Fault Detection and Trouble Shooting

6.1 Security Measures

DANGER

Hazardous electrical voltage



The electrical voltage may be considerably dangerous to limb and life of persons and lead to injuries.

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

6.2 Notes on Trouble Shooting

Service work should only be carried out by authorised specialist staff. In the event of after-sales service and when ordering spare parts specify the data given in the rating plate.

Defective components should only be replaced with original parts.

Regular inspection and maintenance of the appliance prevent disruptions to operation 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 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 and have it checked and repaired by authorised specialist staff, if necessary.
Appliance does not become warm; indicator light does not come on.	Defective connecting cable or mains plug	Switch off the appliance at the mains 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.



7 Cleaning and Care

7.1 Security Measures

DANGER

Hazardous electrical voltage



The electrical voltage may be considerably dangerous to limb and life of persons and 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

Risk of 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.

For cleaning, allow the appliance to cool down sufficiently with the cover removed and wear suitable protective gloves.

ATTENTION

Do not clean with running water



The appliance should not be cleaned with running water, steam-jet or high-pressure washers.

The appliance must be taken out of operation and switched off at the mains beforehand in any area where steam-jet or high-pressure washers are to be used.

7.2 Hygiene Measures

The correct behaviour of the operating staff is decisive for optimal hygiene.

All persons must be informed about the locally valid hygiene regulations, observe them and comply with them.

Stick a waterproof plaster to cover wounds on the 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 well the appliance after carrying out wet cleaning, in order to prevent the development of mould, uncontrolled growth of germs and bacteria and, consequently, contamination of the crockery.

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

The plastic covers can be cleaned manually with a damp cloth. In the case of solid impurities, appliances can also be cleaned in a commercial dishwasher. Washing and rinsing agents suitable for polycarbonate should be used.

Clean the stainless steel covers manually with a damp cloth. Afterwards, let them dry well.



7.4 Special Care Instructions

The resistance to corrosion of stainless steels is based on a passive layer which is formed on the surface when oxygen is admitted. The oxygen in the air is sufficient for the formation of the passive layer, so that faults or damage to the passive layer can be remedied again automatically by mechanical action.

The passive layer develops or reforms more quickly when the steel comes into contact with flowing water containing oxygen. The passive layer can be chemically damaged or disrupted by agents having a reducing (oxygen-consuming) action when the steel comes into contact with them in concentrated form or at high temperatures.

Such aggressive substances are for example:

- 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 the handling of appliances made from "refined stainless steel":

- Always keep the surface of appliances made from stainless steel clean and accessible to the air.
- Use cleaning agents suitable for stainless steel. No bleaching and chloride-containing cleaning agents should be used.
- Remove layers of lime scale, grease, starch and egg-white daily by cleaning. Corrosion can occur
 underneath these layers due to lack of air admission.
- After each cleaning operation remove all cleaning agent residues by rinsing thoroughly with copious fresh water. Afterwards, the surface should be thoroughly dried.
- Do not bring parts made from stainless steel into contact with concentrated acids, seasonings, salts
 etc. for longer than is absolutely necessary. Acid fumes which generate during cleaning of tiles also
 promote the corrosion of "refined stainless steel".
- Avoid damaging the surface of the stainless steel, particularly by metals other than stainless steel.
- Residues of extraneous metals produce extremely small amounts of chemical elements which can cause corrosion. In any case, contact with iron and steel should be avoided because that leads to extraneous rust. If stainless steel comes into contact with iron (steel wool, steel particles from pipes, water containing iron), this can be a trigger for corrosion. Therefore, for mechanical cleaning use exclusively refined steel wool or brushes with natural, plastics or refined steel bristles. Steel wool or brushes with unalloyed steel lead to extraneous rust due to abrasion.



8 Spare Parts and Accessories

8.1 Introduction

Service work should only be carried out by authorised specialist staff.

Defective components should only be replaced with original parts.

In the event of after-sales service and when ordering spare parts specify always the data and corresponding part number given in the rating plate.

8.2 Spare Parts and Accessories List

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

Spare part, part number	Item designation	Туре	Q-ty
0116722	Stainless steel cover	50-50	
0119672	Plastic cover	50-50	
014000401	Swivel caster	arnothing 125 mm, screw plate, plastic housing	2
014000402	Swivel caster with total brake	Ø 125 mm, screw plate, plastic housing	2
91010963	Push bar	left and right, complete	1
014002110	Corner bumper		2
014003210	Cage nut	M5	
014003211	Mushroom-head screw	M5 x 10 A2	
014004104	Tension spring	galvanised, 20g	8
014004104	Tension spring	Stainless steel, 10g	4
014041030	Guide roller	arnothing 24, for guide basket	
014118000	Guide basket	500 x 500	1

KOUH/50-50

Spare part, part number	Item designation	Туре	Q-ty
0116722	Stainless steel cover	50-50	
0119672	Plastic cover	50-50	1
014000401	Swivel caster	Ø 125 mm, screw plate, plastic housing	2
014000402	Swivel caster with total brake	Ø 125 mm, screw plate, plastic housing	2
91010963	Push bar	left and right, complete	1
014001081	Curly lead	3 x 1,0 with Schuko® angle plug	1
014001089	Threaded nuts	M 63 x 1,5; plastic	
014001300	On / Off switch		1
014002110	Corner bumper		2
014002118	Thermostat toggle switch		1
014002170	Switch module	for thermostat	1
014002951	O ring	Ø 63 x Ø 2,0 for switch plate	
014040011-01	Thermostat 20-110 °C	20-110 °C	1
014003210	Cage nut	M5	
014003211	Mushroom-head screw	M5 x 10 A2	



Spare part, part number	Item designation	Туре	Q-ty
014004104	Tension spring	galvanised, 20g	8
014004104	Tension spring	Stainless steel, 10g	4
014041030	Guide roller	Ø 24, for guide basket	
014118000	Guide basket	500 x 500	1

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

Spare part, part number	Item designation	Туре	Q-ty
0117932	Stainless steel cover	65-53	
014041071	Plastic cover	65-53	
014000401	Swivel caster	arnothing 125 mm, screw plate, plastic housing	2
014000402	Swivel caster with total brake	Ø 125 mm, screw plate, plastic housing	2
91010963	Push bar	left and right, complete	1
014002110	Corner bumper		2
014003210	Cage nut	M5	
014003211	Mushroom-head screw	M5 x 10 A2	
014004104	Tension spring	galvanised, 20g	12
014004104	Tension spring	Stainless steel, 10g	4
014041030	Guide roller	arnothing 24, for guide basket	
014041028	Guide basket	650 x 530	1

KOUH/65-53

Spare part, part number	Item designation	Туре	Q-ty
0117932	Stainless steel cover	65-53	
014041071	Plastic cover	65-53	1
014000401	Swivel caster	\varnothing 125 mm, screw plate, plastic housing	2
014000402	Swivel caster with total brake	Ø 125 mm, screw plate, plastic housing	2
91010963	Push bar	left and right, complete	1
014001081	Curly lead	3 x 1,0 with Schuko® angle plug	1
014001089	Threaded nuts	M 63 x 1,5; plastic	
014001300	On / Off switch		1
014002110	Corner bumper		2
014002118	Thermostat toggle switch		1
014002170	Switch module	for thermostat	1
014002951	O ring	Ø 63 x Ø 2,0 for switch plate	
014040011-01	Thermostat 20-110 °C	20-110 °C	1
014003210	Cage nut	M5	
014003211	Mushroom-head screw	M5 x 10 A2	
014004104	Tension spring	galvanised, 20g	12
014004104	Tension spring	Stainless steel, 10g	4
014041030	Guide roller	Ø 24, for guide basket	
014041028	Guide basket	650 x 530	1



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

Spare part, part number	Item designation	Туре	Q-ty
0116722	Stainless steel cover	50-50	
0119672	Plastic cover	50-50	
014004104	Tension spring	galvanised, 20g	8
014004104	Tension spring	Stainless steel, 10g	4
014118000	Guide basket	500 x 500	1

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

Spare part, part number	Item designation	Туре	Q-ty
014128901	Connecting cable set	complete	1
0116722	Stainless steel cover	50-50	
0119672	Plastic cover	50-50	
014004104	Tension spring	galvanised, 20g	8
014004104	Tension spring	Stainless steel, 10g	4
014118000	Guide basket	500 x 500	1

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

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

