

## OPERATION INSTRUCTION

### Rieber Banquet trolleys cooled/frosted

Order no. 88230401	Model BKW – KF 2x2/1
Order no. 88230402	Model BKW – KF 1x2/1
Order no. 88230403	Model BKW – KF – 1 Super

#### **Location:**

Please take care for a surrounding which is neutral in respect to the temperature – no heating source directly nearby, no direct insolation. Rooms with elevated temperature respectively with elevated humidity can cause the production of condensation water.

#### **Power Supply:**

The banquet trolley can only be connected to 230 V/50 Hz. Alternating current by a shockproof socket which has been installed in accordance with regulations.

#### **Operation:**

Press the green rocker switch. The banquet trolley is ready for use as soon as the switch lights up. The banquet trolley has got an electronic thermo regulator with digital display of set point and actual point.

Cooling range: -12°C to +8°C.

The data on the luminous indication are showing the temperature inside the banquet trolley.

Press SET                      Adjusted temperature is visible

Press SET and ▽              Adjusted temperature is getting cooler

Press SET and ▲              Adjusted temperature is getting warmer

#### **Defrosting:**

The banquet trolley has got an automatical defroster with evaporation of condensation water. But in spite of this there is still the danger that the evaporator gets covered by ice caused by influences of the surroundings. We therefore recommend to check it every 2 weeks in respect to icing. In case of icing, switch off the cooling until the evaporater is ice-free.

#### **Cleaning:**

It is advisable to clean the liquefier in the compartment of the cooling machine approximately every 3 months. An ice-free evaporator and clean liquefier facilitates to save energy.

For that the screen at the machine compartment between the wheels has to be screwed off. Free the tubular system from dust by a vacuum cleaner. Remove fatty residues with cloth respectively brush.

**Current-bearing parts may never get in touch with water.**

**Faults:**      Cooling machine is not running anymore  
-possible reasons  
-plug is plugged in socket loosely  
-safety fuse was released (short circuit)  
-temperature selector is put on „room temperature“

Should none of these reasons be applicable, please contact your after-sales service. For your own safety, do not try to repair the trolley yourself.

**Claims:**

In case of claims, please indicate unit type and unit number. Repairs may only be carried out the authorised specialist. Otherwise the warranty becomes void.

## SPARE PART LIST

### Banquet trolley cooled/frosted

Description	Order no.
Refrigerating machine	32501306
Fan evaporator for BKW 1-piece	32510106
Fan evaporator for BKW 2-piece	32510107
Switch clock for defroster model Bosch Sankyo (old)	33355702
Time switch clock model Suevia (new)	33356106
Motor condenser	33840103
Rocker switch, green	33350207
Electrovalve MLD 6 (hot gas valve)	32300104
Digital thermo regulator for BKW 1-piece, cooled	33060207
Digital thermo regulator for BKW 2-pieces, cooled	33060208
Semiconductor sensing element TF 6 KTY81-121 for electrical temperature control device	33064503
Transformer 230/12V for electrical temp. Control device	33170101
Contactator ESB 24 – 40, 230 V	33841908
Magnet frame 171 592x1328mm	37170165
Bar holder for sliding handle	37130501
Fixed caster Ø 200mm, with plate 135x105	32262503
Swivel casters with brake, Ø 200 with plate 135x 105	32261503
Swivel casters Ø 200mm with plate 135x105	32260504
Helix cable with shock-proof right angle plug	33100309
Interlocking device	32105001
Hook, adjustable	32105002
Shim for hook	32105003
Drip cup evaporator VM 3 (up to 18.1.1996)	32560201
Well condensation water (from 18.1.1996 on)	58239902
PU-bumper strip, L-form (up to 26.4.1998)	40201647
PU-bumper strip L-form (from 27.4.1997 on)	40201662
Stopper for PU-bumper strip	37130807
Control panel for BKW 2x2/1	58235101
Control panel for BKW 1x2/1	58235102

## OPERATIONS INSTRUCTIONS

### **Banquet trolley, heated**

Order no. 88230104      Model BKW 1x2/1  
Order no. 88230203      Model BKW 2x2/1

#### **Power Supply:**

Rieber Banquet trolleys have got an operation voltage of 230 Volt/50-60 Hz. As regards nominal voltages the following connected loads are available:

Model BKW 1x2/1 - 2.0 kW  
Model BKW 2x 2/1 – 2.7 kW

#### **Operation:**

Plug the shock-proof plug of the appliance into the socket, which is designed for it and accordingly protected, with nominal voltage mentioned above.  
Helical feeder is extractable to approx. 2m.

#### **Heating up (dry):**

**Important:** When heating dry, the water which probably is in the deep-drawn well, has to be let off by the ball cock which is below the bottom. Otherwise unwanted humidity can be produced.

Press the green rocker switch. The banquet trolley is ready for use as soon as the control lamp light up and then the fan starts. After a short time (5 – 120 seconds according to the state of charging of the internal buffer accumulator) the digital thermo regulator shows the actual temperature inside the trolley. If a higher schedule temperature is adjusted, the heating element will be put into operation until having reached the scheduled temperature, which will then be regulated thermostatically. During the whole process the actual temperature will be shown on the display, which also be kept after disconnection from the mains supply due to the internal buffer accumulator.

#### **Heating up (with humid air):**

**Important:** When heating with humid air, the deep-drawn water well has to be filled with demineralized water (approx. 1,5 litred), which is done by lateral filling after having lifted the cover of the water well or during the warm operation also by filling in the surge edge.

Press the green rocker switch. The banquet trolley is ready for use as soon as the control lamp lights up and then the fan starts. After a short time (5 – 120 seconds according to the state of charging of the internal buffer accumulator) the digital thermo regulator shows the actual temperature inside the trolley. If a higher schedule temperature is adjusted, the heating element will be put into operation until having reached the schedule temperature, will be shown on the display, which will also kept after disconnection from the mains supply due to the internal buffer accumulator.

The quantity of moisture will be adjusted by turning the humidity regulator 1-3, which is located below the green rocker switch.

**Adjusting the scheduled temperature:**

At the digital thermo regulator there are two arrow-keys by which the scheduled temperature can be adjusted. By pressing one of the keys shortly, the actual scheduled temperature will be shown. If the key will be pressed longer than 4 seconds, the scheduled temperature starts to change. Depending on the direction of the arrow, the scheduled temperature rises or falls. But with advancing time the skips become larger. When the key will be let go of, the adjusted temperature will be adopted and the display shows the actual temperature and the heating starts, as described above.

Taking out the register sheet (only model BKW 2x2/1) and the recirculating air conduit for cleaning purposes:

**Attention:** Before starting, switch off the appliance and pull the mains plug!  
Temperature display will also be kept by buffer accumulator!

**Caution:** Tubular heating element can still be hot!

After the griddles respectively Gastronorm-containers have been taken out, the register sheets can be lifted up in the front and can be taken out of the indoor by pulling them slantwise upwards.

By detaching the counternut on the top of the right hand side (by socket spanner 11) there is the possibility to lift the recirculating air conduit a little bit and to remove it to the front.

## 1. Liability and guarantee

Liability and guarantee by the manufacturer are excluded if

- the product is not used properly

*Proper use, page 12*

- the information and instructions of the operating instructions are not observed
- the product including the accessories is not used correctly
- the product including the accessories is not serviced or improperly serviced
- the product including the accessories is improperly repaired or original spare parts are not used
- modifications and functional changes are performed without the manufacturer's approval

All the wearing parts listed here are excluded from the guarantee:

- Drain cocks
- Foil heating/ heating element
- Caster surface
- Switches
- Spiral cable
- Bumper
- Temperature regulator
- Door seal
- Door handle and catch

All guarantee claims made upon the manufacturer are subject to the "Conditions of Sale and Delivery Nr. 35" of the company Rieber GmbH & Co. KG.

## 2. Symbol explanations

### 2.1 Symbols in safety information

The different hazard classes are characterised by the signal word and the symbol colour.



#### **WARNING<sup>1</sup>**

Indicates a possible hazardous situation, which could cause serious bodily harm or death.



#### **WARNING<sup>1</sup>**

Dangerous electrical voltage.



#### **WARNING<sup>1</sup>**

Danger of burning on hot surfaces



#### **CAUTION<sup>1)</sup>**

Indicates a possible hazardous situation, if the safety rules are not observed, could cause damage to a product or objects in the surroundings.



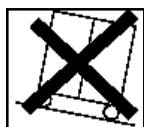
#### **IMPORTANT**

For application information and other useful information.

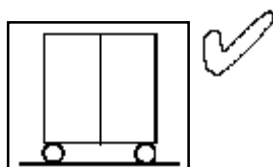
<sup>1)</sup> Classification of the signal words in accordance with ANSI Z535.4

## 2.2 Symbols in handling instructions

- Identifies a handling instruction
- 1. ...5. Handling sequences are numbered
- ⇒ Indicates the result of an action
- Indicates a cross-reference



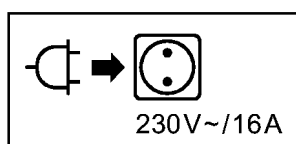
Do not place on sloped surfaces.



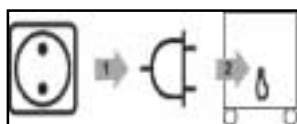
Only place on flat surfaces.



Apply brakes.

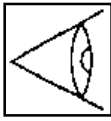


Insert plug into socket (230V ~ / 16 A).



Remove plug from socket and place into socket on the Banquet Trolley.





Visual inspection



Do not clean with a steam spray/high-pressure cleaner



SW 10

Use recommended tool, here:

Allan key, key width 10 mm.

## 2.3

## Abbreviations

**GN**

**Gastronorm**

**Max**

**maximal**

**if**

**necessary**

### 3 General safety information

#### 3.1 Organisational and personnel issues

What needs to be done?	Who does it?
Instruct operator using operating instructions and on product	Manager of responsible area
Operate product properly and with as few hazards as possible	
Provide connections	
Provide protective gloves	
Provide cleaning agents	
Report faults to service/manufacture	
Keep operating instructions in a place which is known and easily accessible to the operator	
Unload packed product, transport and unpack, dispose of packaging	Specialist for transport <sup>1)</sup>
Commission product	Operator <sup>2)</sup>
Operate	Operator <sup>2)</sup>
Move (unload/load)	
Heat up	
Load/unload	
Maintenance	
Cleaning	Operator <sup>2)</sup>
Exchanging door seal	
Setting door catch	
Casters	Only: Service <sup>1) 3)</sup>
Electrics (connection, heating, ventilator control system)	
Turning product off	Operator <sup>2)</sup>

- 1) According to DIN 31000: A **specialist** is someone who, “thanks to his specialist training, expertise, experience and knowledge of the relevant regulations, can assess the tasks which he has been given and recognise possible dangers.”
- 2) According to DIN 31000: A **trained person** is someone who “...is aware or has received instruction on the tasks he/she has been given and the possible hazards arising from improper use as well as training about the necessary protective equipment and protective measures
- 3) All tasks which may only be performed by **Service** are not outlined in these operating instructions.

## 3.2

## Product-specific safety information

### WARNING



Danger of injury on hot surfaces.

When loading/unloading

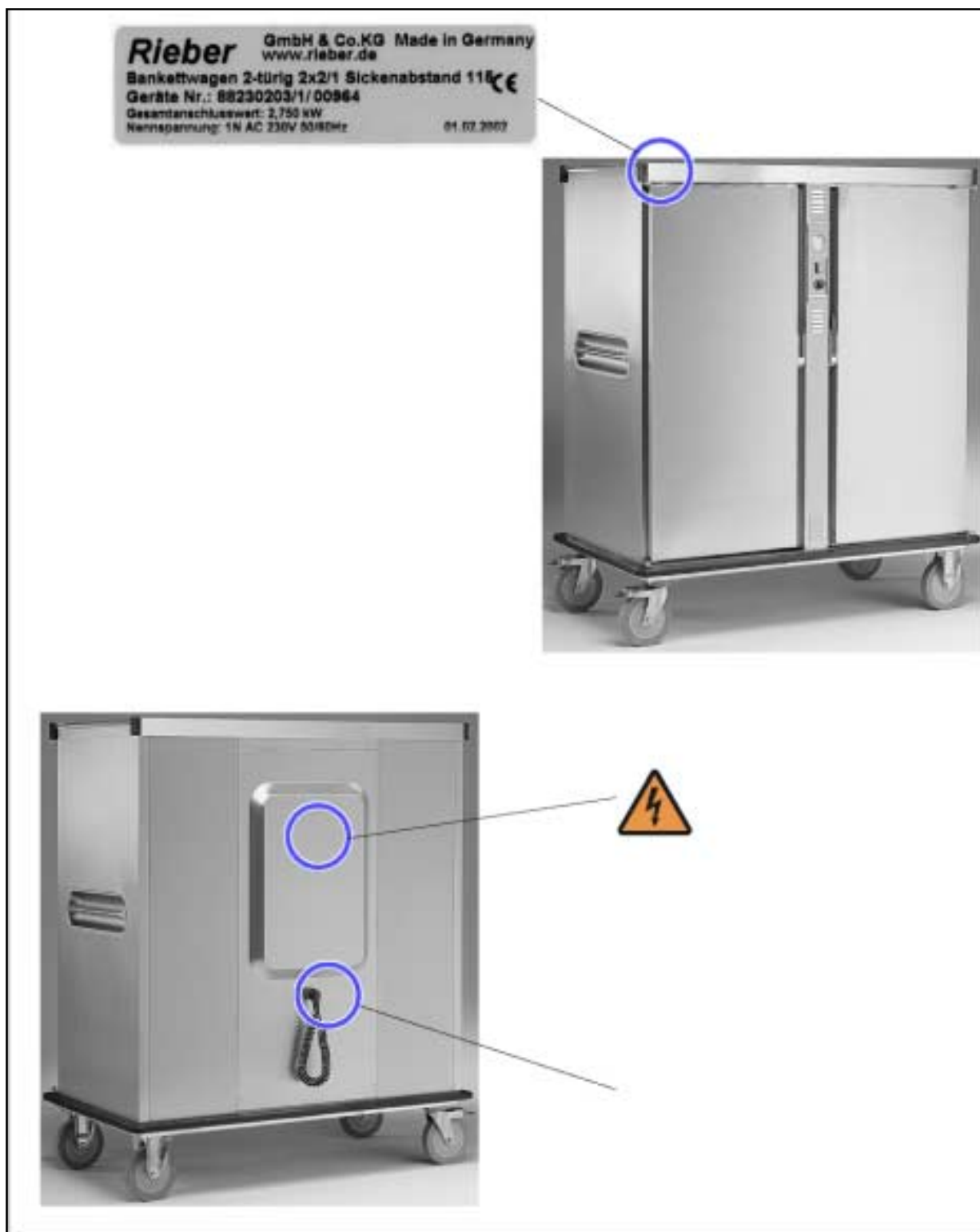
- Avoid touching the inside fittings
- Wear protective gloves



Before cleaning

- Check temperature (<40°C)
- If necessary, allow Banquet Trolley to cool with doors slightly ajar and without presenting a danger to third parties.

### 3.3 Product identification



## 4 Product description

### 4.1 Proper use

Proper use comprises

- the transportation and keeping warm of portioned and covered food plates on grilles or on shelves/trays <sup>1)</sup>
- conditions of use, according to connection

→ *Technical data, page 19*

- pulling/pushing on the side handle and on flat surfaces

→ *Condition of floor, see supplied caster documentation*

Improper use comprises

- the transportation of other containers than those specified here
- using other liquids than the fully demineralised water in the well
- using unit to heat the surroundings
- using unit to transport persons

### 4.2 Functions

Keeping food warm

- Stepless regulation of temperature
- Rapid achievement of selected temperature
- Continuous display of the interior temperature even after unit has been switched off

Preventing food from becoming dry

- Stepless regulation of humidity of inside air  
(by evaporation of water)

1) Interior fittings in accordance with GN 2/1

## 4.3 Models



Fig. 4.3-1 BKW 1 x 2/1 GN  
1 compartment



BKW 2 x 2/1 GN  
2 compartments, central panel

The design is described using the model BKW 2 x 2/1 GN

## 4.4 Design

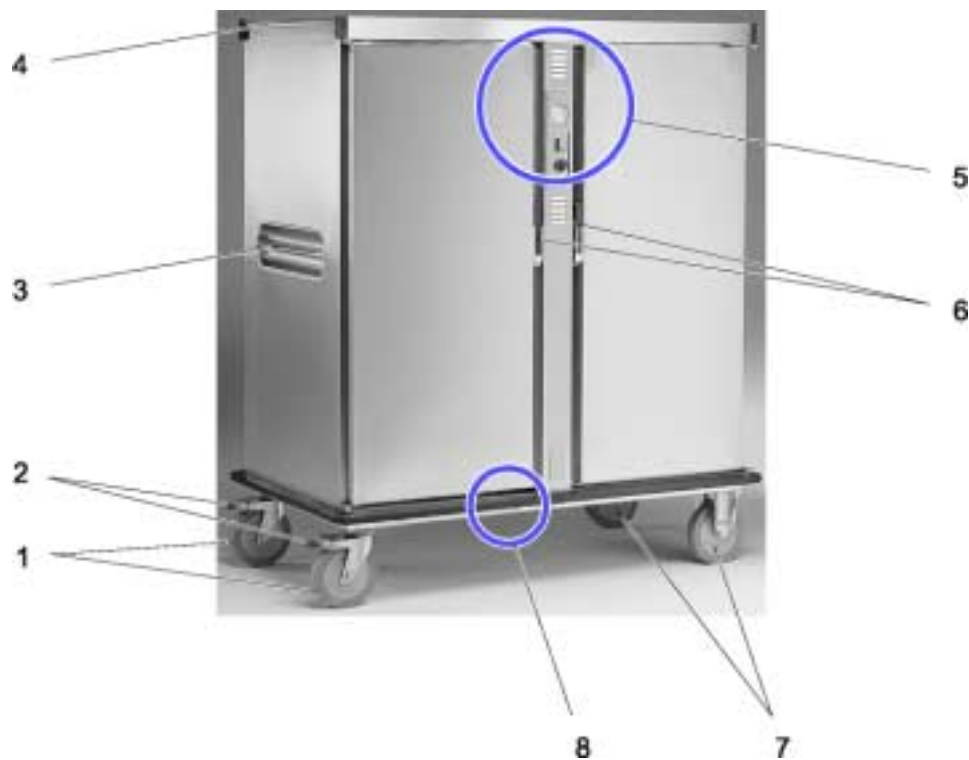


Fig. 4.4-1 Side/front view, doors closed

- |   |                            |            |
|---|----------------------------|------------|
| 1 | Casters (swivel casters)   |            |
| 2 | Brakes                     |            |
| 3 | Handle (on both sides)     |            |
| 4 | Gallery                    |            |
| 5 | Operating field Fig. 4.4-2 |            |
| 6 | Door handle                |            |
| 7 | Casters (fixed casters)    |            |
| 8 | Outlet of water well       | Fig. 4.4-3 |



Fig. 4.4-2 Operating field details

1. Ventilation for control system
2. Temperature display
3. Keys  $\Delta \nabla$  for setting temperature
4. Rocker switch I/O with green control lamp  
for heating and ventilator on/off
5. Knob for humidity regulation



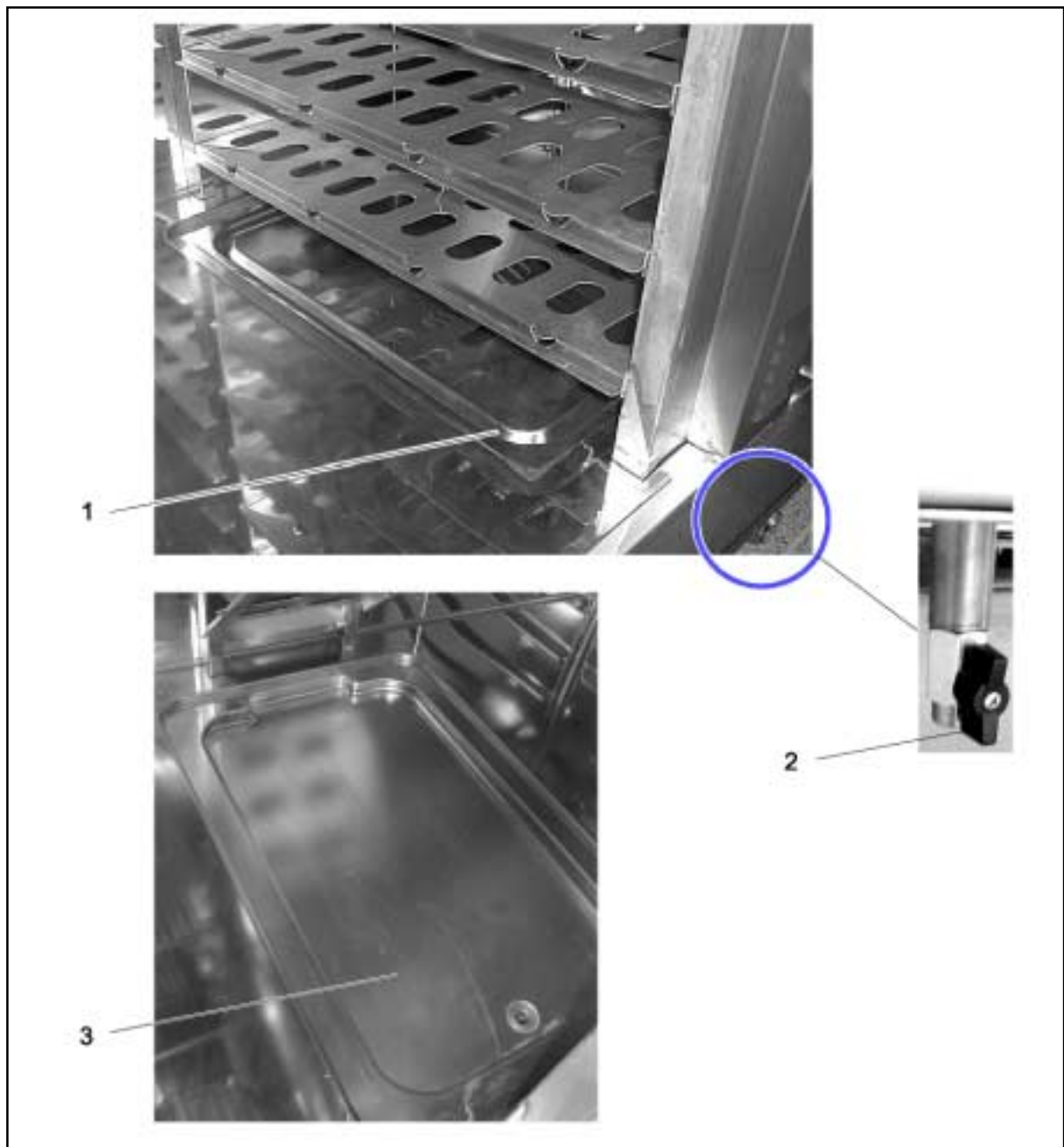


Fig. 4.4-3 Water well details

1. Water well cover
2. Drain cock for water
3. Water well with outlet as well as heating (covered)



Fig. 4.4-4 View from front, doors opened and folded onto side wall

1. Shelf rails for grilles, shelves or trays
2. Tilt protection
3. Securing screw for circulating air channel
4. Circulating air channel
5. Openings for circulating air ventilator
6. Only for BKW 2x2/1 GN: Register shelves

<sup>1)</sup> Interior fittings in accordance with GN 2/1



Fig. 4.4-5 Rear view

1. Heating
2. Plug (in transport securing socket on Banquet Trolley)
3. Spiral cable (2m)
4. All round impact protection

## 4.5 Technical data

Model	BKW 1 x 2/1 GN	BKW 2 x 2/1 GN	
Dimensions			
Length x width x height <sup>1)</sup>	777×837×1712	1490×837×1712	mm
Floor clearance	235	235	mm
Space needed to open door(s) fully	1400	2700	mm
Weight			
Empty weight	120	200	Kg
Loading	120	300	Kg
Total weight incl. Loading	240	500	Kg
Casing, doors			
Protection class	Stainless steel		
	IPP 44 <sup>2)</sup>		
	Door(s) sealed, door closes automatically		
Casters in acc. with DIN 18867, Part 8			
Quantity and type	2 fixed casters, 2 swivel casters with stop function (brake)		
Equipment	Client-specific <i>supplied documentation for the casters</i>		

- 1) Total height including casters dia. 200 mm
- 2) Protection against penetration by foreign bodies > 1 mm  
Protection against splash-water from all directions

Model	BKW 1 x 2/1 GN	BKW 2 x 2/1 GN	
<b>Storage capacity</b>			
Compartments	1	2	
<b>Rail clearance 70 mm</b>			
Grilles, shelves or trays per compartment <sup>1)</sup>	18		Units
Plate dia. Ø 260 mm, not stacked	44	110	
<b>Rail clearance 115 mm</b>			
Grilles, shelves or trays per compartment <sup>1)</sup>	11		Units
Plate dia. Ø 260 mm, not stacked	—	160	
Plate dia. Ø 310 mm, not stacked	—	88	
Storage space per grille	530 x 650	1279x650 (Over both compartments and middle panel)	mm
<b>Electrics</b>			
Mains supply (AC)	230		V
Network frequency	50-60		Hz
Output (total connected load)	2,0	2,7	KW
Connection	Via 2 m spiral cable with contact protected plug in a protected socket with appropriate fuse for output		

1) GN 2/1: 530 x 650 mm

Model	BKW 1 x 2/1 GN		BKW 2 x 2/1 GN
Heating			
Temperature	+30 to +100		°C
Regulation	stepless regulation; circulating air; thermostat regulation		
Temperature display	during heating and after Banquet Trolley has been turned off		
Time needed to heat up to 80°C 1)	approx. 30		min
Heat storage after unit is turned off 2)	ca.	ca.	min
Air humidity			
Regulation	stepless regulation		
Water	approx 1.5		litres
Water quality	fully demineralised		
Duration 2)	approx.	approx.	min

1. When Banquet Trolley is empty and doors closed
2. When doors are closed

## 5 Transportation and unpacking

### 5.1 Delivery condition and scope

#### Delivery condition

- BKW 1 x 2/1 GN on one pallet
- BKW 2 x 2/1 GN in box on one Euro pallet
- Wrapped in foil, packed with polystyrene
- Protective foil for surfaces
- Upright; fully assembled
- Brakes applied, cable secured

#### Delivery scope

- Banquet trolley
- Operating instructions for Banquet Trolley
- Documents about client-specific equipment (e.g. caster documentation)

### 5.2 Transportation and unpacking

What needs to be done?	Who does this?
Unload packed product, transport and unpack, dispose of packaging	Transportation specialist → See page 10



#### WARNING

Danger of injury or equipment damage caused by improper transportation of heavy loads

- Only transport packed Banquet Trolleys with suitable equipment (fork lift truck, lifting trolley)
- Observe packaging labels



**WARNING**

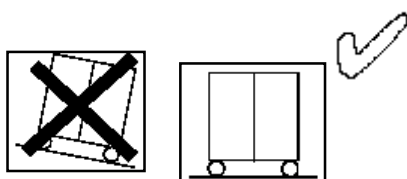
1. Packaged Banquet Trolley from the pallet and
2. Remove outside packaging
3. Remove protective foil
4. Dispose of polystyrene, foils and cartons separately  
*local regulations*
5. Check if delivery is complete and undamaged.



## 6 Commissioning

What needs to be done?	Who does this?
Commission product	Operator (trained person) → Page 10

### 6.1 Location



- Only on flat surfaces
- Ambient conditions, space requirements, connection:  
→ *Technical data, page 19*

### 6.2 Using for first time



#### IMPORTANT

Before using for first time:

- Clean Banquet Trolley thoroughly  
→ *Cleaning, page 39*

## 6.3            **Checking functions**

Brakes/doors

1. Release brakes
2. Hold Banquet Trolley by handle and push backwards and forwards.

*Check:*

Are the casters free?

Can the Banquet Trolley be steered?

3. Apply brakes

*Check:*

Is the Banquet Trolley now immobile?

Can the brakes be used safely with your feet?

4. Open and close doors

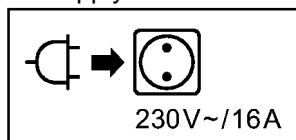
*Check:*

Does the door catch click into position?

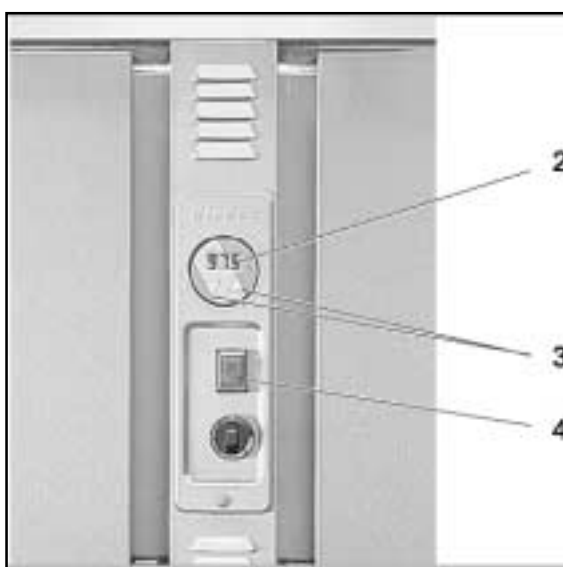
**If necessary, check heating-up function without humid air:**



1. Apply brakes



2. Place plug into socket



3. Press switch (4) (rocker to "I")

- The green control lamp lights up
- The circulating air ventilator starts
- The ACTUAL temperature (2) is shown within two minutes
- The Banquet Trolley is operational.

4. Press key Δ or ▽ (3)

- The factory set TARGET temperature of 80°C is shown.

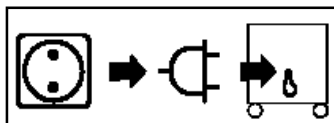
5. Release key Δ or ▽ (3)

- The ACTUAL temperature is shown again.
- Heating-up will start.

*Check after approx. 30 minutes (when trolley is empty)*

Is the ACTAL temperature 80°C?

6. Press switch (4) (rocker to "0")
  - The green control lamp goes off.



7. Remove plug from socket and place in socket on the Banquet Trolley.
  - The ACTUAL temperature is still shown.

## 7 Operation

What needs to be done?	Who does this?
Operate	Operator (trained person) →Page 10
Move (unload/load)	
Heat-up	
Load/unload	

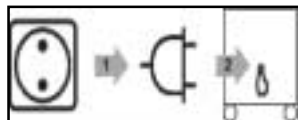


### WARNING

Danger of injury and equipment damage when Banquet Trolley is not moved properly.

#### Before moving:

- Close doors



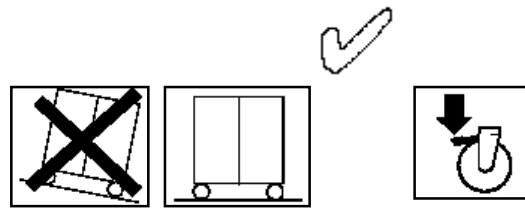
- Remove plug from socket and place in socket on the Banquet Trolley
- Remove all objects <sup>1)</sup> from the gallery

#### Moving:

- Recommended: pull trolley
- Use handles on the side to pull/push, never use the gallery edge
- Before pushing, ensure that the path in front of the Banquet Trolley is free of all obstacles (possible by 2<sup>nd</sup> person)
- Take the significantly increased weight of the loaded Banquet Trolley into consideration; if necessary, move Banquet Trolley with two people.

<sup>1)</sup> Except those objects which cannot fall down during moving or can slide through the gallery edge.

**Parking:**



- Only park Banquet Trolley on even surfaces and apply brakes



**IMPORTANT**

The brakes on the Banquet Trolley are only accessible when pushing.

## 7.1

### Heating-up without/with humidity

1. Insert required number of grilles:  
or if shelves or trays are used
2. Remove all grilles

#### Heating-up without humid air

3. Open drain cock on the water well
  - Any water inside will drain off
4. Close drain cock
 

*Go to Setting the temperature, page 31*

#### Heating-up with humid air

#### WARNING



When Banquet Trolley is already heated up:  
Danger of injury on hot surfaces/or by hot water



- Avoid touching the hot interior fittings
- Wear protective gloves

If necessary close drain cock.

Open doors

approx. 1.5 l  
fully demineralised water

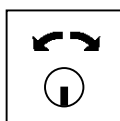
When Banquet Trolley is cold:

5. Lift cover and pour water into the side of the water well.

When Banquet Trolley is already heated-up

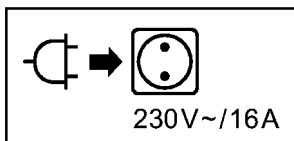
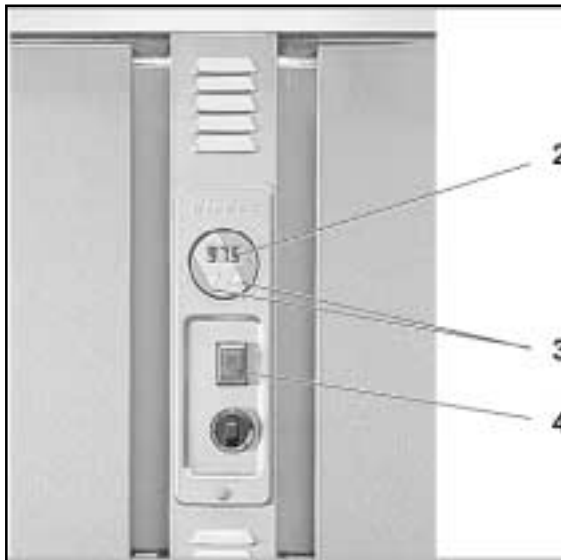
6. Pour water over the surge edge into the water well

7. Close doors



8. Set humid air quantity with knob

## 7.2 Setting the temperature



1. Place plug into socket
2. Press switch (4) (rocker to "I")
  - The green control lamp lights up
  - The circulating air ventilator starts up
  - The ACTUAL temperature (2) is shown within max. two minutes
  - The Banquet Trolley is operational.
3. Press key  $\Delta$  or  $\nabla$  (3) .
  - The previously set TARGET temperature is shown.

### Setting the new TARGET temperature

4. Press key  $\Delta$  or  $\nabla$  until the new TARGET temperature is shown, then release key.
  - The new TARGET temperature is stored
  - The ACTUAL temperature is shown again.
  - The display remains on during heating-up process

Heating-up starts. The Banquet Trolley can be loaded during the heating-up

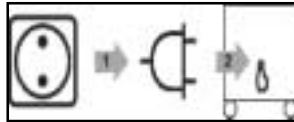


process; in this case, heating-up will take longer.

## After heating-up

When the TARGET temperature is reached:

5. Press switch (4) (rocker to "0")
  - The green control lamp goes off.



6. Remove plug from socket and place in socket on the Banquet Trolley.
  - The ACTUAL temperature is still shown
7. Move Banquet Trolley to loading location

## 7.3 Loading/unloading Banquet Trolley

### CAUTION



Danger of equipment damage due to uncontrolled movement of unsecured doors.

- If possible, leave doors completely open and fold onto the side walls



### WARNING

Danger of injury on hot surfaces

When loading/unloading



- Avoid touching the hot interior fittings
- Wear protective gloves
- Load Banquet Trolley quickly and close doors

## 7.4 Moving loaded Banquet Trolley

### IMPORTANT



The loaded Banquet Trolley is much heavier and this affects its manoeuvrability.

#### After use:

- Unload and clean Banquet Trolley

→ *Cleaning, page 39*

## 7.5 Possible faults and troubleshooting

Symptom	Solution	Who	How
Brakes cannot be applied			
Brakes are defective	Contact Service	Operator	
Casters (swivel casters) are defective			
Banquet trolley cannot be steered			
Brakes are blocked	Unblock	Operator	
Casters are blocked			
Brakes/casters are defective	Contact Service	Operator	
Doors are not tightly sealed or will not close			
Banquet trolley is not loaded correctly	Check load	Operator	Page 20
Door catch is adjusted wrongly or defective	Exchange and set	Operator	Page 46
Door seal is defective	Exchange	Operator	Page 43
Green control lamp does not light up when the rocker switch is at "I"			
Banquet trolley not connected properly	Check connection	Operator	Page 20
Plug/spiral cable defective	Contact Service	Operator	
Rocker switch defective			
Temperature is not displayed			
Display is defective	Contact Service	Operator	
Control system is defective			
Temperature sensor is defective			

Symptom	Solution	Who	How
Temperature cannot be set			
Banquet trolley incorrectly connected or switched on	Check connection, switch on (rocker to "I")	Operator	Page 20
Keypad is defective	Contact Service	Operator	
Thermostat is defective			
Banquet trolley will not heat up			
Banquet trolley incorrectly connected or switched on	Check connection, switch on (rocker to "I")	Operator	Page 20
Thermostat is defective	Contact Service	Operator	
Temperature sensor is defective			
Heating pipe element is defective			
Ventilator is blocked or defective			
Water is leaking			
Drain cock on the water well outlet is not closed	Close drain cock	Operator	Page 16
No humid air input			
No water in the water well	Fill with water	Operator	Page 30
Foil heating is defective	Contact Service	Operator	
Thermostat is defective			

## 8 Maintenance

What needs to be done?	Who does this?
Maintenance	
Clean	Operator (trained person) Page 10
Exchange door seal	
Set door catch	
Casters	Service (technician)
Electrics (connection, heating, ventilator, control system)	

### 8.1 Safety information

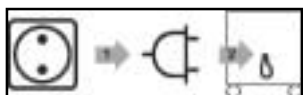


#### WARNING

Dangerous electrical voltage.

Before maintenance work

- Switch off Banquet Trolley (rocker to "0")



- Remove plug from socket and place into socket on the Banquet Trolley



#### CAUTION

Danger of equipment damage due to uncontrolled movement of unsecured doors.

Before maintenance work

- Open doors and fold onto the side walls



## **WARNING**

Danger of injury on hot surfaces

Before maintenance work

- Check temperature display (<40°C)
- If necessary, allow Banquet Trolley to cool with doors slightly ajar and without presenting a danger to third parties

## 8.2 Maintenance plan

<b>After use</b>		
Clean	Operator	Page 39
<b>As required</b>		
Check door catch, if necessary exchange and reset	Operator	Page 46
Check door seal and exchange if necessary	Operator	Page 43
<b>Every 6 months</b>		
Check casters	Service	
Check electrical connection, heating, ventilator and control system		
Check doors and door catches		



## 8.3 Maintenance work

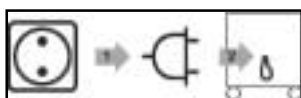
### 8.3.1 Cleaning



#### WARNING

Dangerous electrical voltage.

- Switch off Banquet Trolley (rocker to "0")



- Remove plug from socket and place into socket on the Banquet Trolley



#### WARNING

Danger of injury on hot surfaces

- Check temperature display (<40°C)
- If necessary, allow Banquet Trolley to cool with doors slightly ajar and without presenting a danger to third parties



#### CAUTION

Danger of equipment damage due to improper cleaning

Cleaning agent  
Cloth/brush



- Only use listed cleaning agents to avoid damage  
→ *List of cleaning agents, page 47*
- Do not use steam sprays / high-pressure cleaners

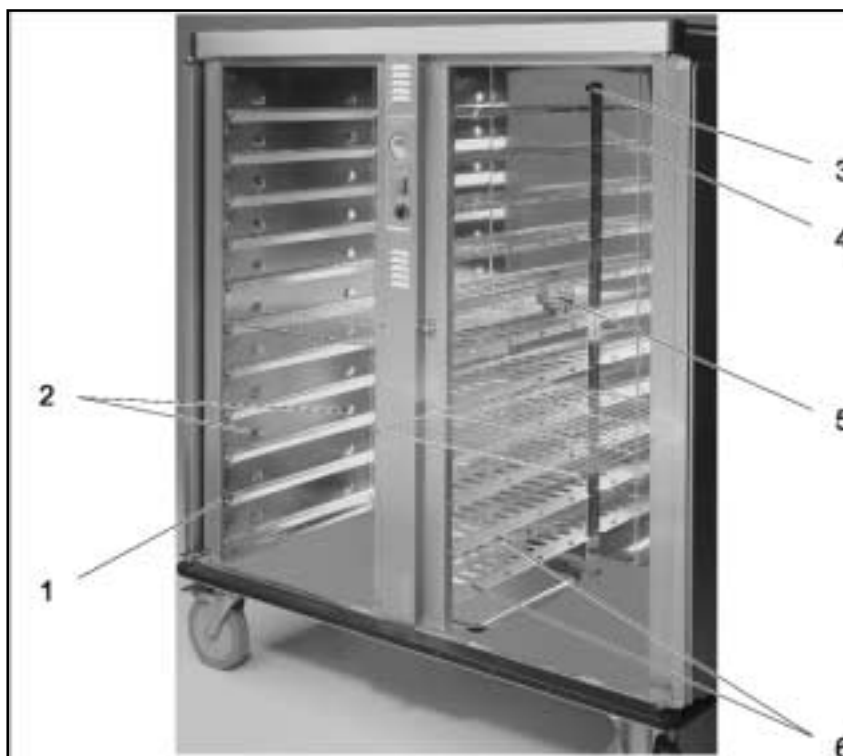


1. Apply brakes
2. If necessary, clean Banquet Trolley from outside
3. Open doors completely and fold onto the side walls
4. If necessary, remove and clean shelves, trays  
→Cleaning regulations fro GN interior fittings
5. Remove and clean cover of water well if necessary
6. Open drain cock at the outlet



### **IMPORTANT**

The register shelves from BKW 2x2/1 GN with 70 mm shelf clearance are welded. Register shelves and circulating air channels cannot be removed.



### Only for BKW 2x2/1 GN with 115 mm shelf clearance

*Register shelves in the middle panel*



#### CAUTION

The temperature sensor can be damaged when the upper register shelf is not removed carefully.

7. Starting at the top, remove register shelves (6) by lifting each one up at the front and pulling out in a upwards movement
8. Clean and dry register shelves

*Circulating air channel*



9. Release securing nut
10. Slightly lift circulating air channel and remove
11. Clean and dry circulating air channel.

### For all heated Banquet Trolleys

#### *Interior space*

12. Pre-treat heavily soiled areas

*List of cleaning agents, page 47*

13. Clean and rinse out the whole interior space
14. Clean and rinse the insides of the doors, the door seal and the edges
15. Complete dry the Banquet Trolley
16. Place clean and dry cover onto the water well and close the drain cock

### Only for BKW 2x2/1 GN with 115 mm shelf clearance

#### *Circulating air channel*

17. Insert clean and dry air channel (4) and tighten securing nut

#### *Registerbleche in der Mittelkonsole*

18. Working from the bottom upwards, insert the clean and dry register shelves by hooking the register shelves into the rear wall and lowering at the front.

### For all heated Banquet Trolleys

19. If necessary, insert clean and dry grilles
20. Close doors.
  - The Banquet Trolley can be moved to loading location

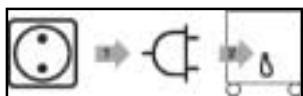
### 8.3.2 Exchanging the door seal



#### WARNING

Dangerous electrical voltage.

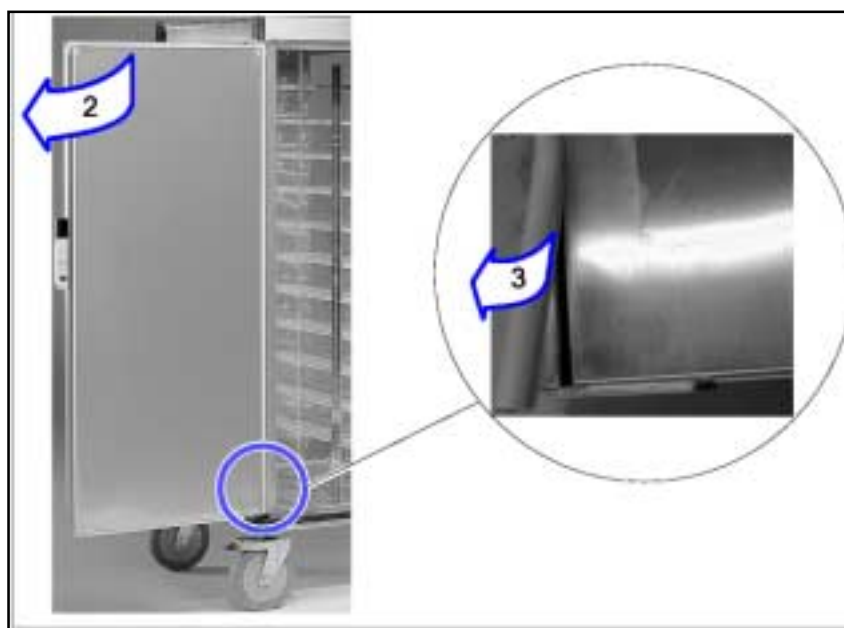
- Switch off Banquet Trolley (rocker to "0")



- Remove plug from socket and place into socket on the Banquet Trolley



1. Apply brakes
2. Open door and fold onto the side wall

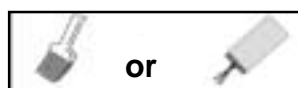


3. Starting at the bottom, loosen and completely remove the damaged seal

Talcum powder

silicone

Cooking oil



4. Coat the slit of the plastic profile with talcum powder or silicone



5. Insert new seal and press in with a rounded object.



### IMPORTANT

The material expands when inserted.

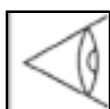
- Keep pressing the seal together when inserting



6. Insert seal until a corner is reached
7. At the corner, only stretch across then insert again.  
Afterwards, press seal into corner using your thumb.



8. Insert seal until the end and cut off any excess.



9. Open door and check seal
10. Clean the seal and inside of the door

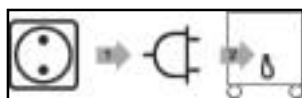
### 8.3.3 Setting the door catch



#### WARNING

Dangerous electrical voltage.

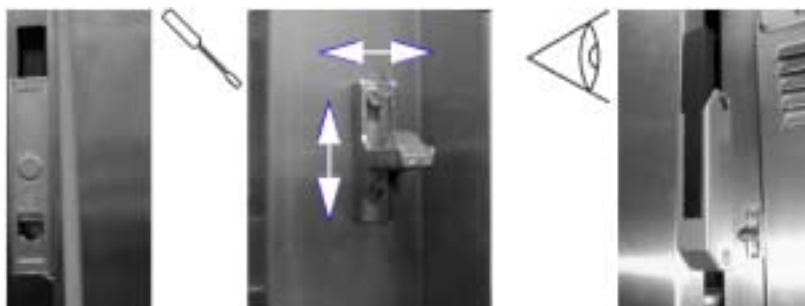
- Switch off Banquet Trolley (rocker to "0")



- Remove plug from socket and place into socket on the Banquet Trolley



1. Apply brakes
2. Open door



3. Set door catch and check how door closes; repeat if necessary



## 8.4 List of cleaning agents

<b>mechanical</b>	
Cloths, soft	Textile scrubbing cloth, fleece, micro-fibre cloth
Brushes, soft	with natural or man-made brushes
<b>chemical</b>	
for light soiling	General purpose cleaner
	Neutral cleaner
	Alcohol cleaner
for heavy soiling	(Abrasive) alkali cleaner
	Cleaner with solvents
	Emulsion cleaner with/without scouring agents <sup>1)</sup>

1) Permitted ingredients in cleaning agents:

*whitener, siliceous earth, magnesium, Vienna chalk, polishing rouge*

## 9 Turning off

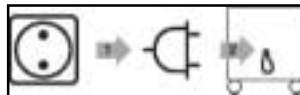
What needs to be done?	Who needs to do this?
Turning product off	Operator (trained person) <i>Page 10</i>



### IMPORTANT

Secure Banquet Trolley:

- Switch off Banquet Trolley (rocker to "0")



- Remove plug from socket and place into socket on the Banquet Trolley
- Unload Banquet Trolley, drain off water and clean.
- Secure plug and doors with e.g. adhesive tape
- Clearly label Banquet Trolley e.g. with sign "not in use"
- Park Banquet Trolley in a suitable place and apply brakes
- If necessary, contact service

## 10 Spare parts

→ Maintenance: What needs to be done?, Who needs to do this? Page 36

→ Guarantee exclusions for wearing parts, page 5

Model	BKW 1× 2/1 GN	BKW 2×2/1 GN
Designation	Order no.	Order no.
	88 23 01 04 –	88 23 02 03 –
Door seal	37 28 11 01	
Door catch	32 10 50 12	
Hinges for door catch	32 10 50 07	
Connection corner for door	37 13 47 03	
Hinge on door	58 23 38 07	
Swivel caster with brake CN DM 200	32 26 15 03	
Fixed caster CN DM 200	32 26 25 03	
Ballofix ball valve	32 33 24 01	
Threaded nipple G1/2"	37 13 93 01	
Stop nut M8	38 44 01 03	
Bearing bush	32 45 09 02	
Blind rivet	38 78 09 03	
Shelf tray for register	58 23 34 04	

Model	BKW 1× 2/1 GN	BKW 2×2/1 GN
Designation	Order no.	Order no.
	88 23 01 04 –	88 23 02 03 –
Switch panel	58 23 51 03	
Thermostat toggle	33 35 30 24	
Seal for Dreefs switch	37 28 06 01	
Digital temperature regulator	33 06 02 09	
Corner piece for lid	37 13 47 02	
Plug	37 13 08 01	
Foil heating 250/500 W	33 01 06 02	
Pipe heating element 2 400 W	33 01 01 18	
Pipe heating element 1 700 W	33 01 01 15	
Rocker switch	33 35 02 07	
Standard set push-in lid	84 09 01 01	
Radial ventilator type R2A/150	33 20 04 06	
Temperature sensor	33 06 45 03	
Thermostat (green)	33 06 04 01	
Transformer	33 17 01 01	
Wago pin strip	33 40 11 01	
Wago plug connection	33 40 12 01	
Spiral wire	33 10 03 09	
Plug holder	37 13 58 02	

Operating Manual

Banquet trolley



[Warm and cold banquet  
systems]

**Rieber**  
[gut gelöst]

# Banquet trolley

## **Subject to technical changes!**

Constant updating means that figures, steps and technical data may change slightly.

## **Manufacturer's address**

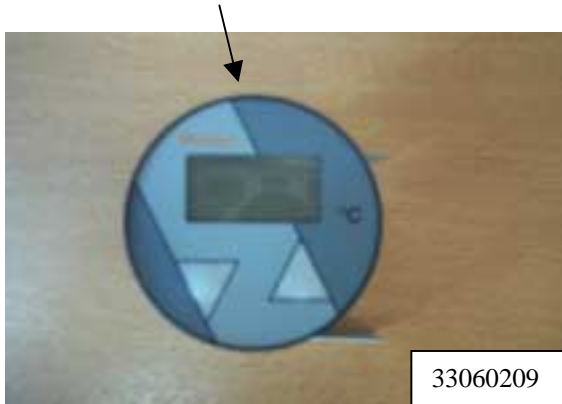
Rieber GmbH & Co. KG  
Postfach 7063  
D - 72734 Reutlingen  
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Document no/version:  
Document type: Instruction Manual


Last updated: 11/2003


## Exchange of the LCD Temperature control of the heated Banquet trolley to LED Temperature control



 Please note this work can only be done by an electrician.

-  Plug out the trolley

-  Please make sure that the trolley is disconnected from any power supply.

-  Please note that there is a risk of injury by sharp corners during the following operation:
- Unscrew cover while holding it firmly



- Cut the silicone seam



- Lift lower part of switch panel lightly and pull it down



- Remove switch panel upwards



- Disconnect plug-type connector



- Disconnect the connection of the mechanical thermostat



- Remove probe-connection at the digital thermostat clip 5+6.



- Remove toggle with screwdriver.



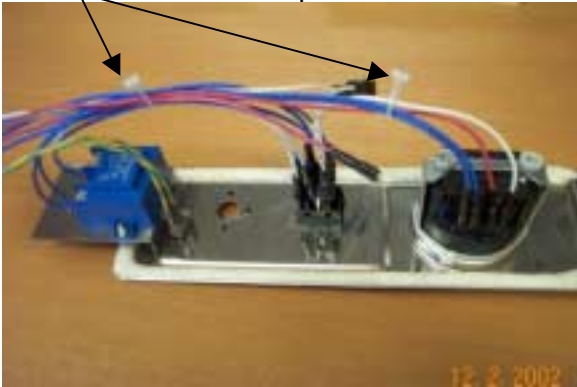
⚠ Danger of injury through slipping screwdriver.

- Unscrew thermostat.

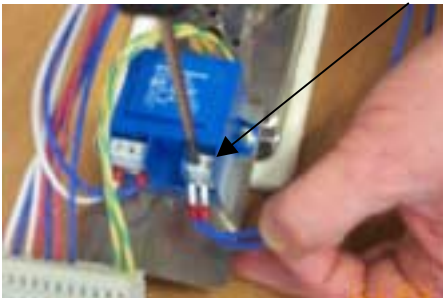




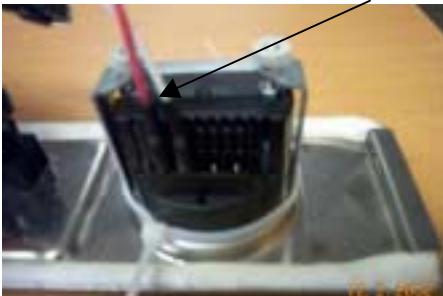
- Remove the rest of the silicone on the panel and the trolley with silicone-remover
- Remove the cable clip.



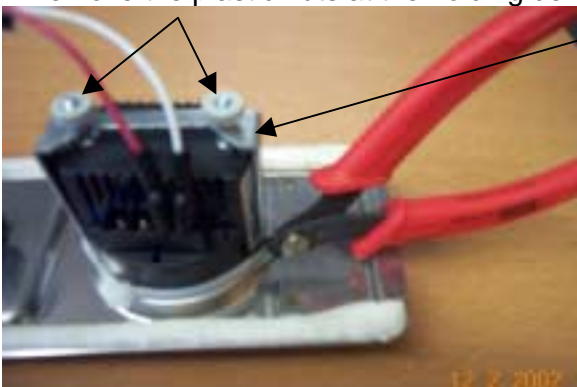
- Release the wires at the transformer clip 3 + 4



- Remove connection 3 + 4 at the thermostat



- Cut the cable clip on the thermostat
- Remove the plastic nuts at the holding device of the thermostat and the fixing itself



- Move the thermostat forwardly out of the panel.
- Disconnect the wire at connection 1 + 2 of the old thermostat

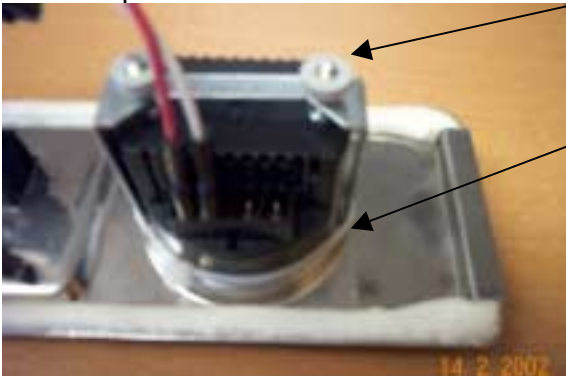


- Connect the wires at connection 3 (white cable) + 4 (red cable) with the new thermostat.

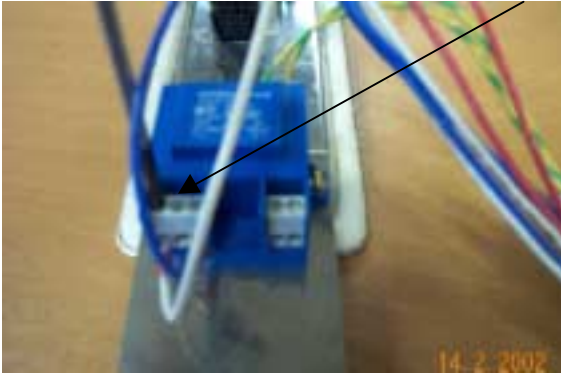


Please pay attention to not mix up these connections, otherwise the trolley won't work.

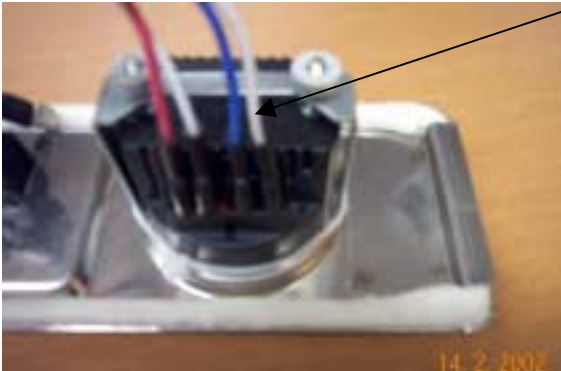
- Put the thermostat into the panel, pay attention to horizontal position.
- Put on the thermostat fastening and tighten the plastic nut softly. Install a new cable clip
- Fix the plastic nut.



- Disconnect the white cable at wire no. 1 and the blue cable to wire no. 2 from the transformer.



- Cut the cable protection at the end, put the insulation shield on these ends (33140501) and insulate the cables after that put on two flat pins 6,3mm (33147302).
- Connect now the white cable to connection no. 1 and the blue cable to connection no. 2.



- Remove the transformer
- Fasten the cable clip



- Connect the thermostat (by screws)

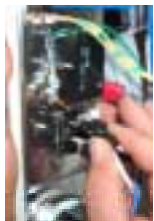


⚠ The flat spring has to be added to assure a correct protection ground connection.

- Connect the probes to the digital thermostat on wire 5 + 6.



- Put on the connection of the mechanical thermostat



- Reconnect the plugs



- screw in the panel
- put on the toggle
- install a new silicone seam



- After all please check carefully if the trolley works correctly!