

BLANCO INMOTION Heated Tray Transport Trolleys
TTW-F 16-105/115 DBZE/DBZG/DBEU,
TTW-F 20-105/115 DBZE/DBZG/DBEU,
TTW-F 24-105/115 DBDE/DBDG,
TTW-F 30-105/115 DBDE/DBDG,
TTW-F 32-105/115 DBZU, TTW-F 40-105/115 DBZU

Operating Instructions

General information

Warranty This unit was manufactured with care using high-quality materials and modern production techniques.

The period of warranty from the date of purchase for this Gerätis 24 months and for wearing parts and electrical parts six months. The warranty encompasses all the malfunctions and faults arising through the material and manufacturing. Malfunctions and faults caused by improper handling and external influences are excluded. Justified complaints are eliminated free of charge within the warranty period.

Your right to warranty is proven by the purchase receipt bearing the date of purchase. Our terms of business and delivery also apply.

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Technical modifications Subject to modifications for the purpose of technical improvement.

Product documentation Operating Instructions; target group: operating personnel, kitchen directors.

Typographical conventions

-  Important **notes** on particularities or special cases.
- i** **Explanatory information** in chapters or sections containing instructions.
-  **Cross reference** to a chapter, section or external document.
- ✓ **Requirement** which must be fulfilled before the subsequent steps can be carried out.
- **Action** or activity which must be carried out.

Model XYZ

A section identified in this way applies only to a particular **unit model** or unit option.

Warnings

Signal word!

Type and source of danger

Possible consequences of noncompliance with the warnings.

- Measures to avoid dangers and the consequences thereof.

The signal word (caution, warning, danger) informs of the level of danger.

Caution warns of possible light bodily injuries and damage to property.

Warning warns of possible serious bodily injuries.

Danger warns of possible highly severe/fatal bodily injuries.

Contents

About this product	Application	1
	Conditions of use	1
	Product features	1
	Standard model	3
	Options and accessories	3
Safety	General information	4
	About this product	4
	Transportation	4
	Startup	4
	Operation	5
	Shutting down	6
	Cleaning and care	6
	Maintenance	7
	Repairs	7
	Standards and guidelines	7
Transportation	Checking for/reporting on damage incurred during transportation	8
	Scope of delivery	8
	Unpacking	8
	Disposing of packaging material	9
Startup	Prerequisites for operation	10
	Initial startup	10
	Connecting and switching on unit	11
Operation	Unit overview	12
	Overview of temperature regulation	13
	Setting the setpoint temperature	13
	Preheating the unit	13
	Opening unit door	14
	Closing unit door	15
	Loading the unit	15
	Moving unit to a new location	17
	Traversing ramps, recesses, slanted surfaces	19
	Keeping food warm	19
	Refrigerating food	20
	Distributing food	20
Shutting down	Shutting the unit down	21
Help in the event of problems	Operation indicator LED does not illuminate	22
	Operation indicator LED illuminates, but food is not sufficiently temperature maintained	22
	Operation indicator LED illuminates, but unit compartment remains cold	22
	Corrosion of stainless-steel parts	22
	Unit exterior is damaged	23
Cleaning and care	Stainless steel	24
	Cleaning frequency	24
	Cleaning methods	24
	Cleaning agents	24

	Cleaning unit	24
	Removing areas of corrosion on stainless steel	25
Maintenance	Having the unit regularly maintained	26
	Checking locking brakes	26
	Commissioning a periodical electrical safety inspection	26
	Check connection cable and power plug	26
Repairs	Authorized persons	27
	Description of problem	27
	Replacing components	27
	Spare parts	27
	Address	28
Disposal	Disposing of the unit	28
Technical data	General data	29
	Electrical data	31
	Environment	31
Ordering information	TTW-F 16-115 DBZG.	32
	TTW-F 16-105 DBZG.	32
	TTW-F 16-115 DBZE.	32
	TTW-F 16-105 DBZE.	32
	TTW-F 16-115 DBEU.	32
	TTW-F 16-105 DBEU.	32
	TTW-F 20-115 DBZG.	32
	TTW-F 20-105 DBZG.	32
	TTW-F 20-115 DBZE.	32
	TTW-F 20-105 DBZE.	32
	TTW-F 20-115 DBEU.	32
	TTW-F 20-105 DBEU.	32
	TTW-F 24-115 DBDG	32
	TTW-F 24-105 DBDG	32
	TTW-F 24-115 DBDE.	32
	TTW-F 24-105 DBDE.	32
	TTW-F 30-115 DBDG	32
	TTW-F 30-105 DBDG	32
	TTW-F 30-115 DBDE.	32
	TTW-F 30-105 DBDE.	32
	TTW-F 32-115 DBZU.	32
	TTW-F 32-105 DBZU.	32
	TTW-F 40-115 DBZU.	32
	TTW-F 40-105 DBZU.	32
	Operating instructions	32
Accessories	Gastronorm/European norm trays	33
	Dishes	33
	Cloches	33
	Eutectic plates	33
	Menu cards	33
	BLANCO microfiber cleaning cloth	33
	Stainless steel cleaning and care agent BLANCOPOLISH	33
	Service CD.	33

About this product

Application The heated BLANCO INMOTION Tray Transport Trolley was designed for the following applications:

- Temperature maintenance of food on Gastronorm/European norm trays
- Transportation of food on Gastronorm/European norm trays

The heated BLANCO INMOTION tray transport trolley is not suitable for heating up or preparing food. It may not be used as a room heater.

Used together with pre-cooled eutectic plates (coolant accumulators), the BLANCO INMOTION tray transport trolley can be used to refrigerate food for a short time while heating is turned off. The BLANCO INMOTION tray transport trolley is not suitable for refrigeration of food for longer periods of time.

The heated BLANCO INMOTION tray transport trolley is particularly suitable for use in social facilities (clinics, retirement homes, day care centers), hotels, the food service industry (banquets, party services) and in cafeterias (canteens, dining halls).

Conditions of use **Environment**

The unit may be operated at an ambient temperature of +15 °C to +32 °C and at normal humidity (without moisture condensation).

Instruction of third parties

If the unit is lent to third parties, these persons must be instructed in the safe handling of the unit and possible dangers must be pointed out.

Product features **General**

The heated BLANCO INMOTION tray transport trolley is made of stainless steel as standard.

The unit body is double-walled and insulated. The front of the unit is closed via one or two double-walled unit doors. The unit door(s) have been provided with a snap-in lock.

As standard, the transportation mechanism of the heated tray transport trolley with two or three compartments consists of two fixed castors and two steering castors with locking brakes. The models with only one compartment have a transportation mechanism with four steering castors. Two of the steering castors have locking brakes.

The unit designation contains an abbreviation of the unit model. TTW stands for tray transport trolley, F for hinged door. The subsequent numbers and letters have the following meaning:

- The first and second digit refer to the tray capacity (16, 20, 24, 30, 32, 40 trays), e. g. TTW-F **16**-105 DBZG.
- The third, fourth and fifth digit specify the spacing of the support ledges (105, 115 mm), e. g. TTW-F 16-**105** DBZG.
- The first letter indicates the design of the walls (D = double-walled), e. g. TTW-F 16-105 **D**BZG.
- The second letter stands for heated (B = heated), e. g. TTW-F 16-105 **B**BZG.
- The third letter stands for the number of compartments (E = 1 compartment, Z = 2 compartments, D = 3 compartments), e. g. TTW-F 16-105 **D**BZ**G**.
- The last letter stands for the tray type (G = Gastronorm trays, E = Euronorm trays or U = Gastronorm and Euronorm trays).
 - Gastronorm trays
(TTW-F 16-105/115 DBZ**G**, TTW-F 20-105/115 DBZ**G**,
TTW-F 24-105/115 DBD**G**, TTW-F 30-105/115 DBD**G**)
The trays are inserted with the short sides toward the back and front.
 - Euronorm trays
(TTW-F 16-105/115 DBZ**E**, TTW-F 20-105/115 DBZ**E**,
TTW-F 24-105/115 DBD**E**, TTW-F 30-105/115 DBD**E**)
The trays are inserted with the short sides toward the back and front.
 - Gastronorm and Euronorm trays
(TTW-F 16-105/115 DBE**U**, TTW-F 20-105/115 DBE**U**,
TTW-F 32-105/115 DBZ**U**, TTW-F 40-105/115 DBZ**U**)
The trays are inserted with the long sides toward the back and front.
Two trays per ledge fit in a unit compartment.

Operation

An On/Off switch, used for starting and ending temperature maintenance, is located on the unit. The unit is equipped with mechanical temperature control. The temperature control uses a mechanical capillary-tube thermostat. The temperature control has a rotary knob for continuous temperature setting ("10" corresponds to a temperature of approx. +75 °C). Vertical push handles allow easy movement of the unit. Stable corner guards protect the unit from damage. Circumferential impact protection strips are available as an option.

The unit door(s) can be locked on the short sides.

The inner side walls are designed with support ledges for accepting trays. The unit model which is only designed for Gastronorm trays has two indentations above each of the support ledges. They prevent accidental tipping when removing the trays. These indentations are optional on all other unit models.

- Standard model** The standard model of the heated BLANCO INMOTION tray transport trolley features:
- Double-walled unit body made of stainless steel
 - Up to three compartments, depending on the model
 - Operating elements on the short side of the unit
 - Ledge spacing of 115 mm
 - Four corner guards
 - Two push handles on the left short unit side (seen from the operator side)
 - Four steering castors, two with locking brakes (units with one compartment)
 - Two steering castors with locking brakes and two fixed castors (units with two or three compartments)
 - Castor arrangement "A": castors at the unit corners

- Options and accessories** The heated BLANCO INMOTION tray transport trolley is available with the following optional equipment:
- All-around railing
 - Ledge spacing of 105 mm
 - Circumferential impact protection strip
 - Lockable unit doors
 - Two additional push handles on the right short unit side (seen from the operator side)
 - Hitch and coupling (units with two or three compartments)
 - Menu holder
 - Eutectic plates (coolant accumulators); suitable only for unit compartments with Gastronorm tray dimensions
 - Waste system
 - Castor arrangement "D": Steering castors on the unit corners and two additional fixed castors on both long unit sides
 - Castor model available in different materials and diameters

Safety

General information The unit has been built using state-of-the-art technology. Accordingly, all the requirements necessary for safe operation have been fulfilled. Additional dangers do nevertheless exist when the unit is operated. The safety precautions and warnings in these operating instructions are there to help you protect yourself against these sources of danger.

Safety precautions

Thoroughly read and observe the safety precautions in this chapter.

The operator is responsible for the observance of the safety precautions in these operating instructions.

Warnings

Observe the warnings with the danger symbol (warning triangle) in the text.

operating instructions

These operating instructions must be read carefully before initial use.

The operator is responsible for ensuring that all users have read these instructions before using the unit.

Keep these operating instructions in a location which is always accessible to operating personnel.

About this product **Application**

The unit may only be used for the applications specified.

The operator is responsible for the appropriate and proper use of the unit.

Conditions of use

The unit is only to be operated under the appropriate environmental conditions.

The users of the unit must be instructed in the operation of the unit and must have read and understood these operating instructions.

Transportation **Upright transport position**

Transport the unit in an upright position only.

Transportation with a truck or delivery vehicle

The unit is only to be transported in a truck or delivery vehicle with a loading ramp.

Secure against the shifting of the unit. Do not place a tension belt around the sliding handles. The handles can be bent.

Secure the unit against vertical movement during transportation. Just locking the brakes is insufficient transportation security.

Use padded safety bars.

Startup **Location**

Never operate the unit next to equipment which develops large amounts of steam (e.g. dishwasher). The steam can cause moisture condensation on the unit.

When the unit is connected to the power the moisture film may cause a short-circuit or an electric shock.

Startup after a storage period

When the unit is brought from a cold storage room into a kitchen, moisture from the air in the room will form on the surfaces and the inside the unit.

When the unit is connected to the power the moisture film may cause a short-circuit or an electric shock.

Do not operate the unit until it has reached room temperature.

Mains connection

The mains voltage and frequency listed on the rating plate must match the corresponding values of the electrical outlet.

The unit may not be used if the insulation on the power cable or the power plug is damaged.

The power plug is only to be plugged in or unplugged when the unit is switched off. Otherwise the unit electrical system can be damaged.

Always unplug the plug at the power plug housing.

Operation General information

The user must be aware of the dangers involved with the unit and be able to assess them.

The unit is only to be used when it is in proper working order.

If damage is present, secure the unit against accidental use and have repairs carried out immediately at one of the following locations:

- In-house, by BLANCO-trained technician
- Externally, by BLANCO-trained customer service engineer
- BLANCO Service

Always secure the unit from rolling away by setting the locking brakes. The unit can cause injuries and damage to property if allowed to roll away accidentally.

Avoid opening the unit door(s) unnecessarily during temperature maintenance.

Always keep cloches over food on trays.

Eutectic plates (coolant accumulators)

Remove eutectic plates before heating up the unit and during temperature maintenance of food. Eutectic plates can deform, and in extreme cases even explode when exposed to heat.

Unit top

Do not place items with an area load exceeding 25 kg on top of the unit.

Hot unit parts, objects and food

The unit interior and objects contained within become very hot during temperature maintenance and can cause burns.

Protection (e. g. with hotpads or protective gloves) must be used when handling hot objects.

The food which is temperature maintained can cause scalding.

Warm unit exterior and hot unit rear wall

The unit exterior becomes warm during temperature maintenance. The rear wall of the unit, which contains the heating element, becomes hot.

Do not place objects or food items which are sensitive to heat on the unit top.

Hygiene regulations

Observe the corresponding regulations on foodstuffs and the properties of the food when maintaining the temperature of food.

Danger of children being trapped inside

Secure empty tray transport trolley from access by children. Children who climb into an empty tray transport trolley and close the unit door cannot get out unassisted. Place the empty tray transport trolleys with the unit door side toward the wall or place them in an area inaccessible to children.

Change of location

Remove any objects from the unit top before changing its location. Objects can slide off the unit top when pushing the unit.

Hold unit door(s) closed while changing its location. Trays can fall out of the unit when it is pushed.

With the unit door(s) closed, the unit can be tilted to an angle of 10°. Only sloping surfaces with an incline <10° may be crossed.

If the unit is on a sloped surface, it must be secured against rolling away with further measures in addition to locking the locking brakes (e. g. with wheel chocks).

To minimize the danger of damage to the castors, avoid overloading the castors:

- Do not move the unit when the locking brakes are locked
- Avoid impacts
- Do not traverse bumps or steps
- Do not traverse uneven floors

The unit is to be pushed only, never pulled.

When moving the unit, ensure that no persons or objects which are located in the way of the trolley are overlooked.

If the person pushing the trolley cannot see over it, a second person must walk in front of the trolley when it is being moved to enable it to be moved forward safely.

Always use two hands when pushing the unit. Depending on the weight of the unit, if you push it with just one hand it is possible you would not be able to apply the brakes quickly enough.

Be careful to ensure that your hands are not pinched (danger of crushing) between the push handles and walls or other objects (e.g. cabinets).

Two people (one at each side wall of the unit) are required to move the unit over ramps or swales.

Shutting down Unplugging the power plug

Do not unplug the power plug if the unit is switched on. Otherwise the unit electrical system can be damaged.

Cleaning and care Hygiene

The provisions of the hygiene guidelines 93/43/EEC as well as your national hygiene regulations must be complied with.

The unit fulfills the requirements of the hygienic design H S.

Cleaning frequency

Clean the unit thoroughly after each use.

Cleaning methods

Use only approved cleaning methods.

Do not use a steam jet device or high-pressure cleaner.

Power plug

Unplug the power plug before cleaning the unit. Water seeping into the unit can cause a short-circuit. If this happens, there is a risk of electric shock.

Cleaning water

Thoroughly dry the unit after cleaning. Remove cleaning water from the floor of the unit interior.

A danger of slipping exists if cleaning water runs out of the unit during or after cleaning. Completely wipe up any water which runs out of the unit.

Hot unit parts and objects

The unit interior and objects located within become hot during temperature maintenance (danger of burns!). Allow the unit to cool off before it is cleaned.

Maintenance Locking brakes

Regularly check the effectiveness of the locking brakes.

If the effectiveness of the brakes is not sufficient, have the defective castor replaced immediately by one of the following:

- In-house, by BLANCO-trained technician
- Externally, by BLANCO-trained customer service engineer
- BLANCO Service

Electrical safety: Re-inspection

At least once every six months, have a periodical electrical safety inspection carried out by a professional electrician in accordance with the DIN VDE 0702 series of standards.

Connection cable and power plug

At least once every six months, check the connection cable and power plug for mechanical damage and signs of excessive aging in accordance with BGV A 3 or the corresponding national regulations.

Repairs Authorized persons

The unit may only be repaired by the following service points:

- In-house, by BLANCO-trained technician
- Externally, by BLANCO-trained customer service engineer
- BLANCO Service

The warranty will be invalidated if the unit is repaired by anyone else.

Standards and guidelines

Observe the applicable standards, guidelines and safety regulations.

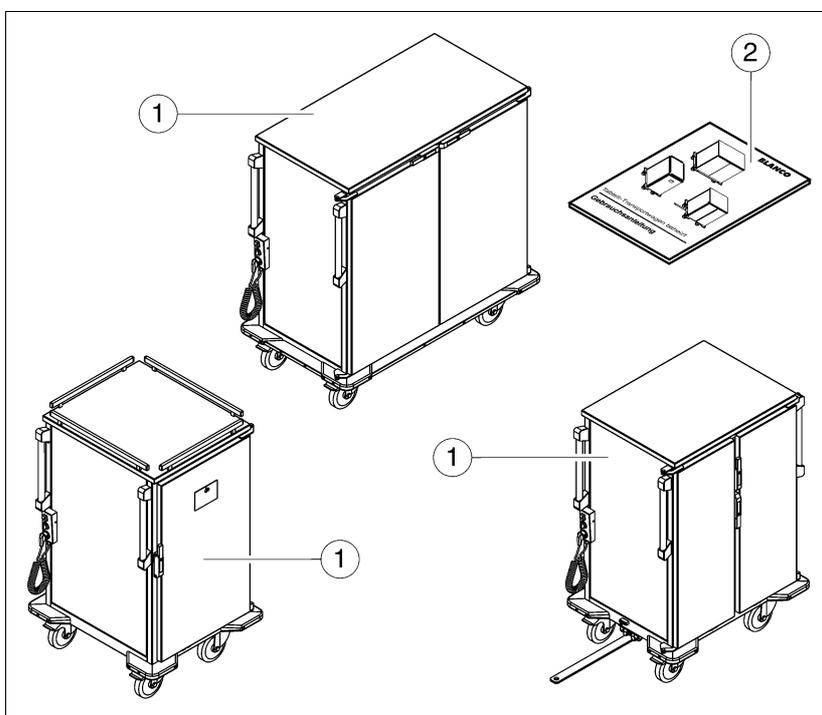
The operator is responsible for compliance with the applicable standards, guidelines and safety regulations.

Transportation

Checking for/reporting on damage incurred during transportation

- ☞ It is imperative that the unit be checked immediately after delivery for damage incurred during transport (visual inspection).
- Record on the waybill (description of defect) any damage incurred during transportation, doing so in the presence of the carrier.
- Have the carrier confirm the damage (signature).
- Retain the unit and notify BLANCO of the damage, enclosing the waybill.
- or –
- Do not accept the unit and return it to BLANCO via the carrier.
- ☞ This procedure will ensure correct processing of claims. If the transportation damage is reported later the consignée of the unit must provide evidence of this.

Scope of delivery



- (1) BLANCO INMOTION Heated Tray Transport Trolley
- (2) Operating instructions

The exact scope of delivery and model of the heated BLANCO INMOTION tray transport trolley are to be taken from the delivery documentation.

Unpacking

- Open the transportation packaging at the places provided. Do not rip or cut it!
- Check the scope of delivery.

Disposing of packaging material

- ☞ Packaging materials can be handed over to a recycling center after quoting the disposal contract number. If you cannot find the disposal contract number, it can be obtained by contacting BLANCO Service.
- Dispose of packaging material correctly and in an environmentally responsible manner.

Startup

- Prerequisites for operation**
- ✓ The unit has reached room temperature and is dry
 - ✓ There are no signs of defects or visible damage to the unit

Initial startup Heating up empty unit for the first time

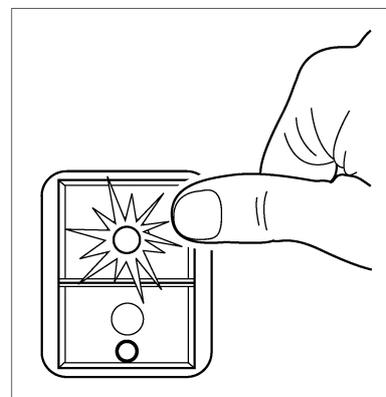
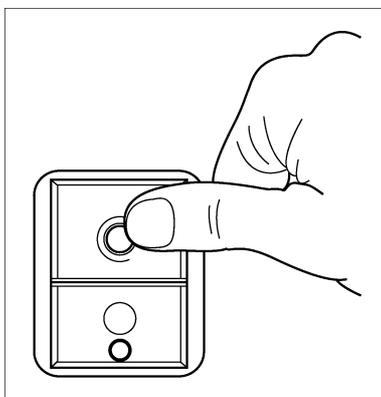
- ☞ During the initial startup, the insulation material which becomes hot may cause an unpleasant odor. For this reason, BLANCO recommends heating the unit empty for approx. 2 hours before the initial use.
- ✓ The unit door(s) is/are closed

⚠ Caution!

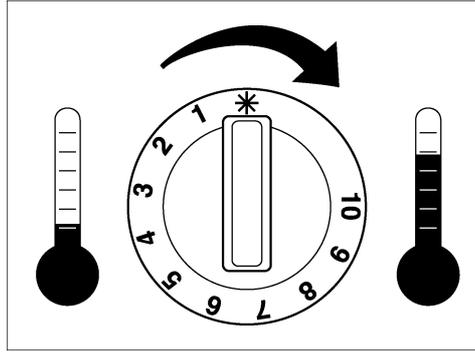
Damage to the unit electrical system!

If the unit is not rated for the mains voltage or frequency which is available, the unit's electrical system may suffer permanent damage.

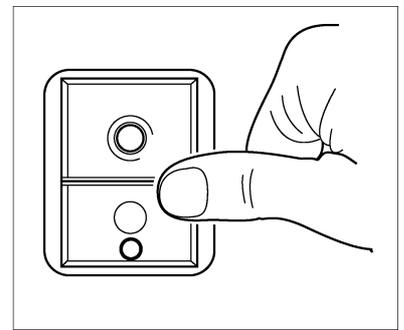
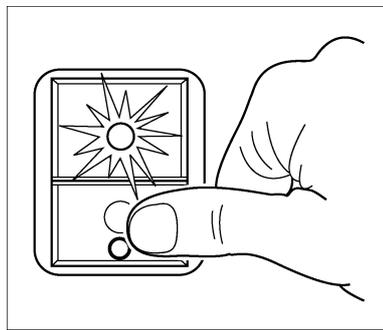
- Before connecting, ensure that the mains voltage and frequency listed on the rating plate match the corresponding values of the electrical outlet.
- Ensure that no objects which are sensitive to heat are located inside the unit or on the unit top.
- Ensure that there are no eutectic plates (coolant accumulators) inside the unit.
- Plug the power plug into the electrical outlet.
- Switch on heating of the unit compartment(s) with the On/Off switch. The operation indicator LED illuminates.



- Set rotary knob of temperature control to the highest level.



- Heat unit approx. 2 hours.
- Switch off heating of the unit compartment(s) with the On/Off switch. The operation indicator LED goes out.



- Air out all unit compartments.
- Clean the unit.

Connecting and switching on unit

Caution!

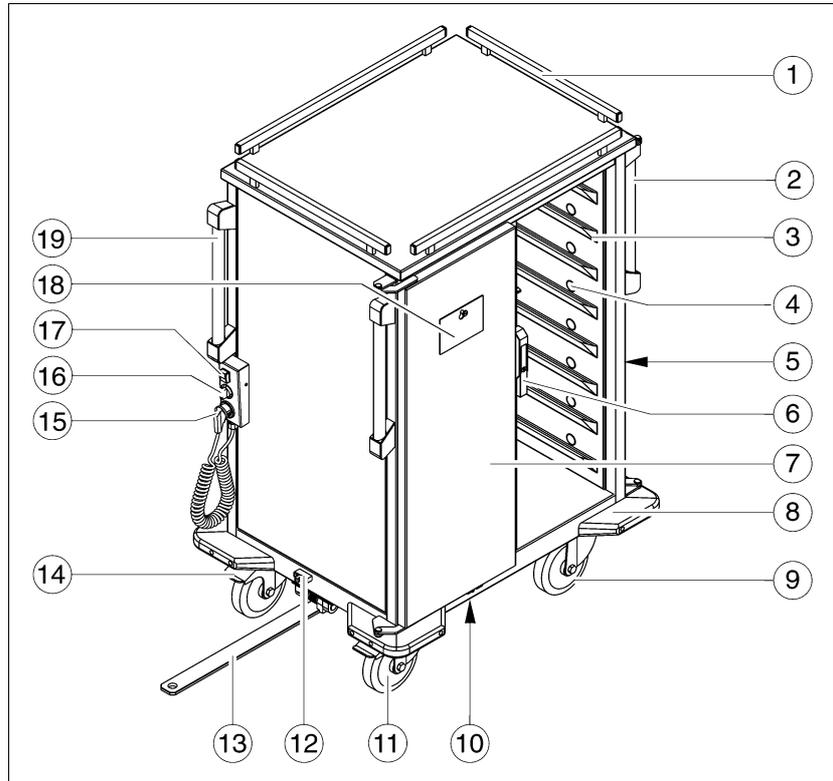
Damage to the unit electrical system!

If the unit is not rated for the mains voltage or frequency which is available, the unit's electrical system may suffer permanent damage.

- Before connecting, ensure that the mains voltage and frequency listed on the rating plate match the corresponding values of the electrical outlet.
- Ensure that no objects which are sensitive to heat are located inside the unit.
- Ensure that there are no eutectic plates (coolant accumulators) inside the unit.
- Plug the power plug into the electrical outlet.

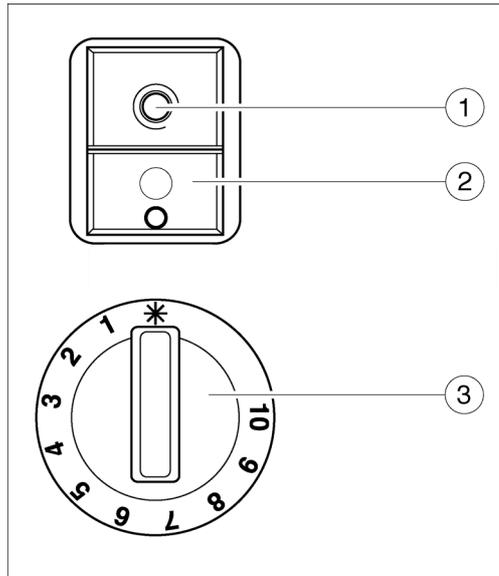
Operation

Unit overview



- (1) Railing (optional)
- (2) Push handle (optional)
- (3) Support ledge
- (4) Tip safety (optional)
- (5) Unit door: locked at side wall
- (6) Door handle with door lock
- (7) Unit door
- (8) Corner guard
- (9) Fixed castor (for unit with only one compartment: steering castors)
- (10) Ball catch (for locking the unit door to the side wall)
- (11) Steering castor
- (12) Door lock
- (13) Hitch (optional)
- (14) Locking brake
- (15) Power cable with power plug retainer
- (16) Temperature regulator
- (17) On/Off switch
- (18) Menu card holder with menu card (both optional)
- (19) Push handle

Overview of temperature regulation



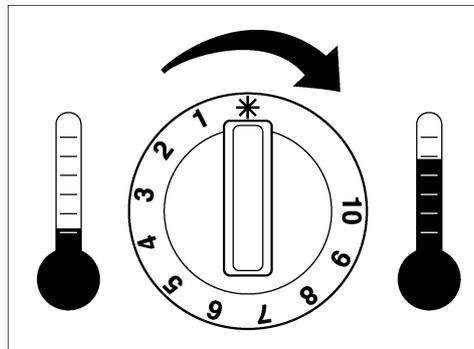
- (1) Operation indicator LED
- (2) On/Off switch
- (3) Rotary knob for setting the setpoint temperature in the unit

The desired setpoint temperature in the unit can be set continuously via the rotary knob. The setting value "10" corresponds to a maximum setpoint temperature of approx. +75 °C.

The mechanical temperature control is based on a capillary-tube thermostat.

Setting the setpoint temperature

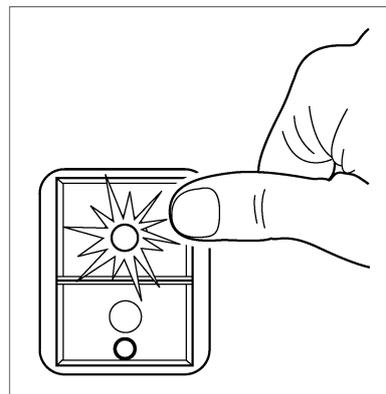
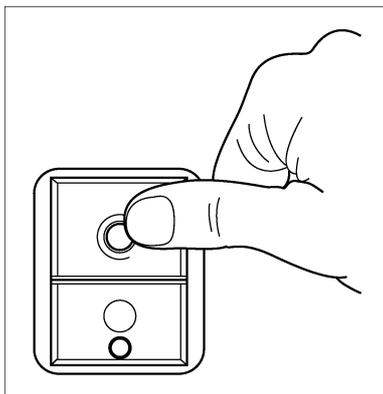
- Set rotary knob of temperature control to the desired level.



Preheating the unit

- i If the unit is to be used for maintaining the temperature of food, it must be preheated for at least 60 minutes before it can be loaded with food.
- ✓ The unit door(s) is/are closed
- Ensure that no objects which are sensitive to heat are located inside the unit or on the unit top.
- Ensure that there are no eutectic plates (coolant accumulators) inside the unit.
- Plug the power plug into the electrical outlet.

- ▶ Switch on heating of the unit compartment(s) with the On/Off switch. The operation indicator LED illuminates.



- ▶ Change the setpoint temperature if necessary.
 - ↳ Subsection "Setting the setpoint temperature" on Page 13.
- ▶ Preheat the unit for at least 60 minutes.

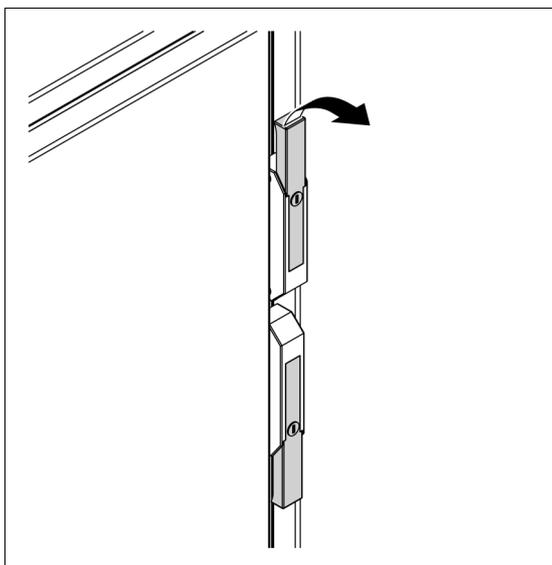
Opening unit door

Caution!

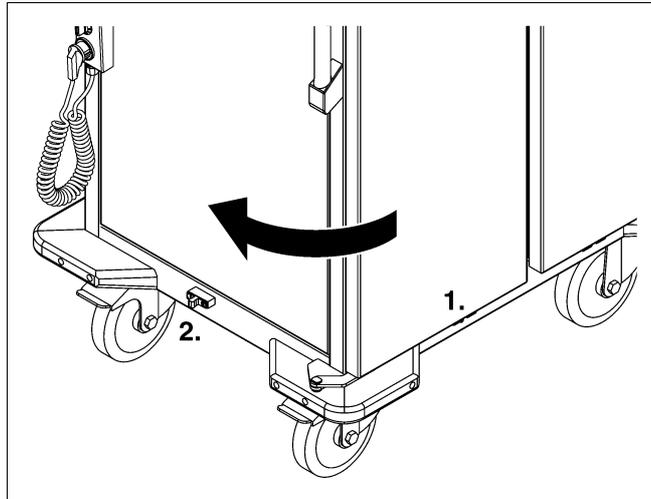
Hand can be pinched!

Your hands can be pinched to the side walls and injured when locking the unit door.

- ▶ Do not put your hand between the unit door and the unit or hold it there when locking.
 - ▶ Carefully open and lock the unit door (without momentum).
-
- ▶ If the unit door is locked, unlock the lock with a key.
 - ▶ Pull the door handle on the door lock in the direction of the arrow and open the unit door.



- Open the unit door completely (270°) and press onto the short side of the unit.
The door catch (1.) is felt to engage in the door lock (2.).



- Closing unit door** ► Release the unit door by pulling it.

⚠ Caution!

Hand can be pinched!

Your hands can be pinched and injured when the unit door is being closed.

- Do not put your hand between the unit door and the unit or hold it there when closing.
- Carefully close the unit door (without momentum).
- Press the unit door into the lock until it is felt to engage.

- Loading the unit**
- ✓ If the unit is to be used to maintain the temperature of food: Unit has been preheated for at least 60 minutes
 - ✓ Food on trays is covered with cloches
 - Open unit door(s).
 - ↳ Chapter "Opening unit door" on Page 14.
 - To prevent shifting of the center of gravity to the unit top, load the unit from the bottom up when loading partially.
 - Insert the tray so that the tray edges lie on the ledges. With a unit model with a tray tip safety, make sure that the tray edges do not rest on the indentations for the trip safety.
 - Close unit door(s).
 - ↳ Chapter "Closing unit door" on Page 15.

Coupling trolleys together **Unit model with hitch**

- i** When changing location, trolleys which are equipped accordingly can be coupled together via the hitch. Individual or coupled trolleys can be connected to a towing vehicle using the hitch. Take the specifications of the towing vehicle manufacturer into account here, e. g. the permissible towing load.

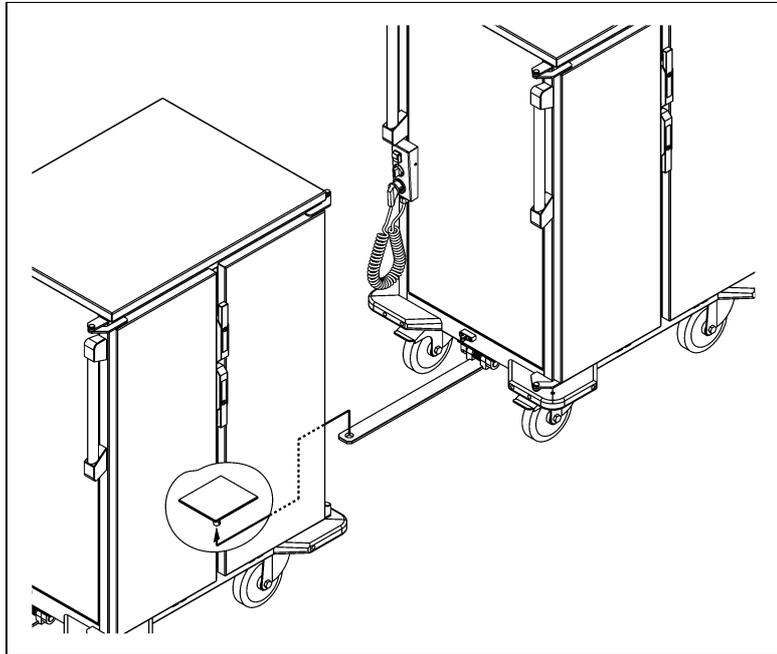
- i** In the rest position, the hitch is pressed up against the side wall of the unit with a spring. For connection of the hitch to the fastening pin of the other unit, the hitch is folded down.

⚠ Warning!

Hitch can fly up!

Danger of injury from unchecked flying up of the springloaded hitch.

- Make sure that no extremities are located in the swinging area of the hitch.
 - Always secure the coupled hitch with the securing rod.
-
- Position the trolleys in such a way that the hitch-side of one trolley faces the pin-side of the other trolley.
 - Pull securing rod from the pin (the securing rod is attached to the trolley via a chain).
 - Fold the hitch down and guide it under the pin of the other trolley.
 - Release hitch.

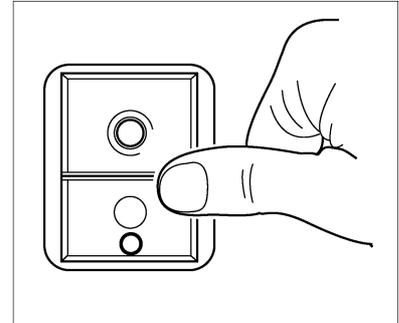
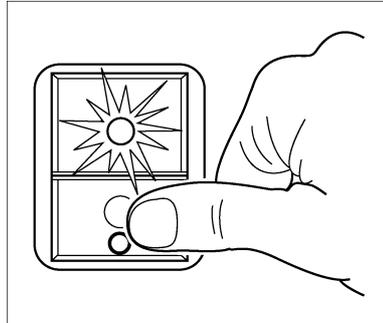


The spring pushes the hitch upward. The pin locks into the hitch.

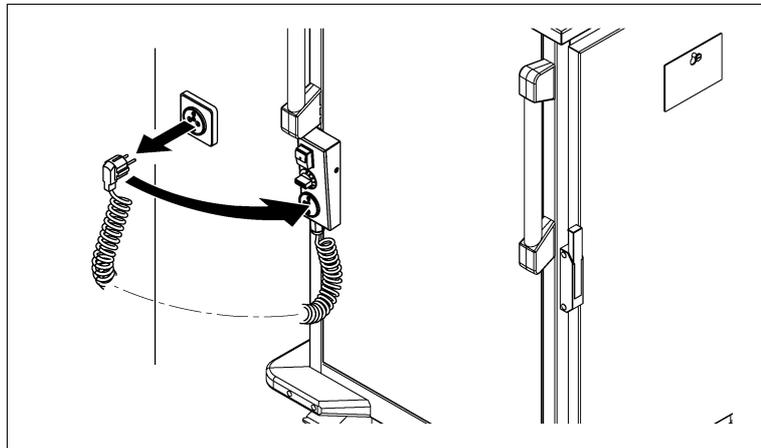
- Insert securing rod into the corresponding hole in the pin.
The hitch is secured.
- i** The securing rod secures the coupled hitch to the pin of the trolley being pulled. After decoupling, reinsert the securing rod into the corresponding hole of the pin. This ensures that the securing rod does not rub against the floor and is not lost.
-

Moving unit to a new location

- ☞ If the driving route is uneven, measures must be taken.
 - ☞ Chapter "Traversing ramps, recesses, slanted surfaces" on Page 19.
- ✓ Do not place objects on top of the unit
- ✓ The unit door(s) is/are closed
- Switch off heating of the unit compartment(s) with the On/Off switch. The operation indicator LED goes out.



- Unplug the power plug and insert it into the power plug retainer.



⚠ Caution!

Be careful not to jam your foot!

Your foot can be pinched and injured when you release or lock the locking brake.

- Be careful not to place your foot between the locking brake and the corner guard/impact protection strip.

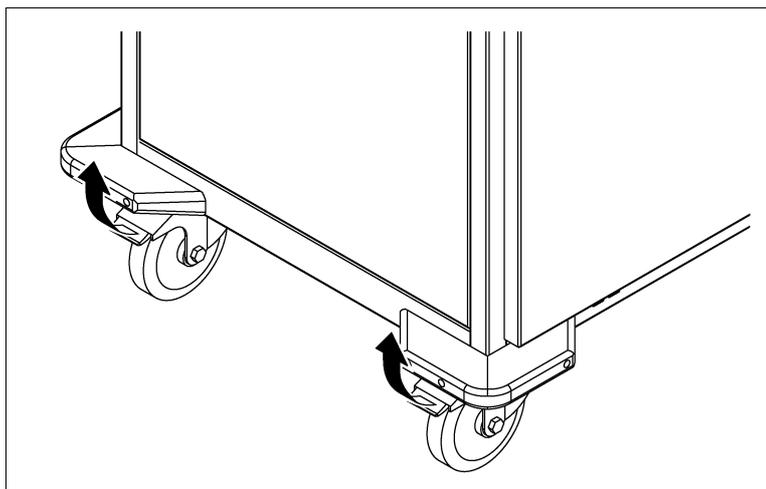
⚠ Warning!

Limited field of vision!

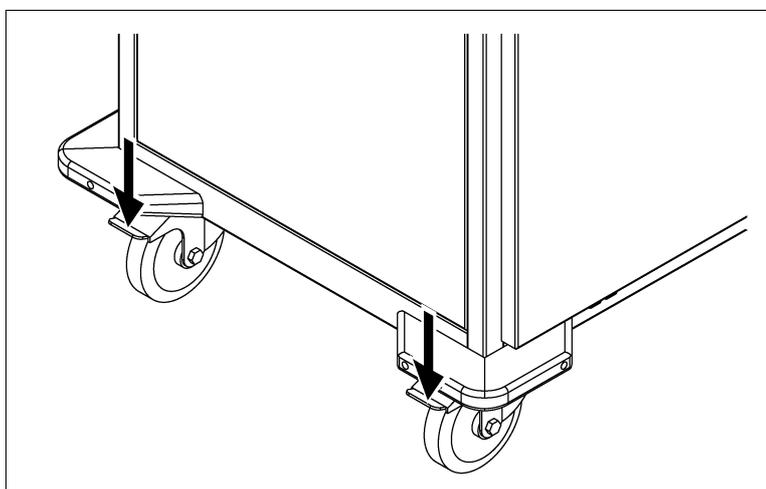
When pushing the unit, a person in front of the unit can be overlooked and injured. The unit or an object before the unit can be damaged due to limited field of vision.

- Make sure that another person walks ahead of the unit when pushing.
- Always push the unit using both hands.
- Push the unit so that your hands on the push handles are a sufficient distance from the wall or other objects and cannot be crushed.

-
- Release the locking brakes.



- Using two hands, carefully push the unit to its new location.
- Lock the locking brakes.



Traversing ramps, recesses, slanted surfaces

- ✓ Two people
- ✓ Load the unit from the bottom up when loading partially

 **Warning!**
The trolley can tip!

The unit can tip over when traversing a slanted surface.

- Never move the unit across a surface (e. g. ramp) with an incline > 10°.
-
-

 **Warning!**
The locking brakes have insufficient braking power!

The effectiveness of the locking brakes is not guaranteed on ramps. The unit can start to move and cause injuries.

- Lock the unit on a ramp with the locking brakes and also secure it against rolling away (e. g. with wheel chocks).
-
-

Unit models with four steering castors and two fixed castors
 **Warning!**
The trolley can swerve sideways!

The fixed castors can hover in the air in a recess or the lower area of a ramp. In this case, the unit can swerve sideways and cause injuries.

- Two people should always be used to move the unit across ramps and recesses.
 - Move the unit across ramps and recesses with extreme caution.
 - Ensure that the trolley does not swerve sideways when moving across ramps and recesses.
-
-

- First check whether the trolley can be safely pushed across the ramp, recess or slanted surface.
- Carefully push the trolley across the ramp, recess or slanted surface with two people (one at each end of the unit).

Keeping food warm

- ✓ Unit has been preheated for at least 60 minutes
- If the unit was unplugged from the power supply after preheating (e.g. after a change of location), plug in the power plug again and switch on the heating of the unit compartment(s) with the On/Off switch.
- Change the setpoint temperature if necessary.
 - ↳ Subsection "Setting the setpoint temperature" on Page 13.
- Maintain the temperature of the food as long as desired.
- Do not open the unit door(s) unnecessarily during temperature maintenance.

Refrigerating food

- i** The main application of the unit is temperature maintenance of food. In combination with pre-cooled eutectic plates (coolant accumulators), the unit can be used for the short-term refrigeration of food. The pre-cooled eutectic plates must be completely solidified to achieve a maximum refrigeration.
- ☞ The unit is in no way suitable for long-term refrigeration of food. Comply with the respective standards.
- ☞ The unit must be fully cooled down after a previous temperature maintenance before refrigeration begins.

Unit model with 2 or 3 compartments

Caution!

Undesired heating of heat-sensitive objects or food!

The unit has a common temperature control for all unit compartments. During temperature maintenance, **all** compartments are always heated. For this reason, the unit is not suitable for simultaneous refrigeration and temperature maintenance of food in different unit compartments.

- ▶ Before refrigeration, switch off heating of the unit compartment(s) and allow the unit to cool fully.
 - ▶ During refrigeration, do not load any unit compartments with warm food.
-
-
- ▶ Ensure that the power plug is unplugged.
 - ▶ Ensure that the unit interior has cooled down.
 - ▶ Insert pre-cooled eutectic plate(s) in the top pair of ledges of the unit compartment(s) to be cooled.
 - ▶ Close unit door(s).

Distributing food

Warning!

Hot unit interior!

The unit interior and objects contained within become very hot during temperature maintenance and can cause burns.

- ▶ Protection (e. g. with hotpads or protective gloves) must be used when handling hot objects.
-
-

Warning!

Hot liquid food!

Hot liquid food can splash out from the edge of the dish and cause scalding.

- ▶ Keep trays in a horizontal position.
-
-
- ▶ Open the unit door completely (270°) and press onto the short side of the tray transport trolley.
 - ☞ Chapter "Opening unit door" on Page 14.
 - ▶ Remove trays.
- ☞ The unit must be cleaned thoroughly after use.
☞ Chapter "Cleaning and care" on Page 24.

Shutting down

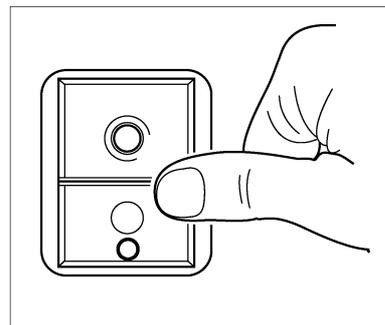
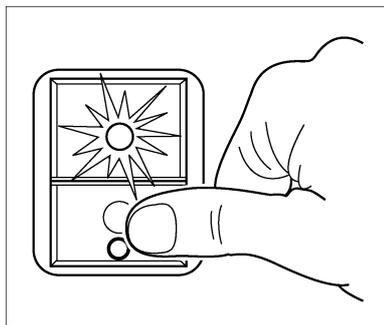
Shutting the unit down

Warning!

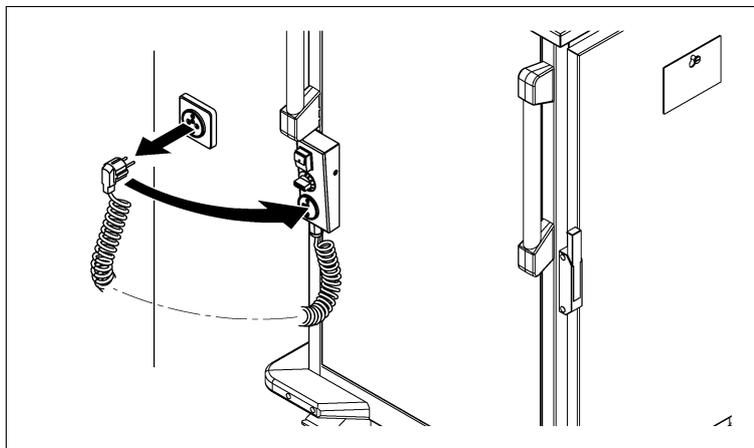
Danger of children being trapped inside due to locked unit door!

Children who climb into an empty tray transport trolley and lock the unit door cannot get out unassisted.

- Place the empty tray transport trolleys with the unit door side toward the wall or place them in an area inaccessible to children.
- Switch off unit with the On/Off switch. The operation indicator LED goes out.



- Unplug the power plug and insert it into the power plug retainer.



Help in the event of problems

Operation indicator LED does not illuminate

Cause	Action
Power plug is unplugged.	<ul style="list-style-type: none"> ▶ Plug the power plug into the electrical outlet.
Power plug is damaged; a wire is broken, for example (can also occur without external damage).	<ul style="list-style-type: none"> ▶ Have power plug replaced by a facility authorized to carry out repairs. ↳ Chapter "Repairs" on Page 27.
Customer-accessible fuse (household fuse) is defective.	<ul style="list-style-type: none"> ▶ Check the customer-accessible fuse and replace it if necessary.
Unit's electrical system is defective.	<ul style="list-style-type: none"> ▶ Notify a facility authorized to carry out repairs. ↳ Chapter "Repairs" on Page 27.

Operation indicator LED illuminates, but food is not sufficiently temperature maintained

Cause	Action
Temperature setting set too low.	<ul style="list-style-type: none"> ▶ Set a higher temperature. ↳ Subsection "Setting the setpoint temperature" on Page 13.
Unit's electrical system is defective.	<ul style="list-style-type: none"> ▶ Notify a facility authorized to carry out repairs. ↳ Chapter "Repairs" on Page 27.

Operation indicator LED illuminates, but unit compartment remains cold

Cause	Action
Unit's electrical system is defective.	<ul style="list-style-type: none"> ▶ Notify a facility authorized to carry out repairs. ↳ Chapter "Repairs" on Page 27.

Corrosion of stainless-steel parts

Cause	Action
Incorrect handling/care.	<ul style="list-style-type: none"> ▶ Remove the areas of corrosion. ↳ Subsection "Removing areas of corrosion on stainless steel" on Page 25. ▶ Ensure proper handling/care.

Unit exterior is damaged

Cause	Action
Damage during transport, change of location or other external influence.	<ul style="list-style-type: none"> Shut the unit down. <ul style="list-style-type: none"> Chapter "Shutting down" on Page 21. Secure the unit from being started up accidentally. Notify a facility authorized to carry out repairs. <ul style="list-style-type: none"> Chapter "Repairs" on Page 27.

Cleaning and care

Stainless steel Surfaces made of stainless steel must be kept clean, dry and open to the air at all times. When unit is not in operation, keep door(s) open to allow air circulation within.

Regularly remove lime, fat, starch and protein coatings by cleaning. Corrosion due to lack of air contact can occur under these coatings.

Do not allow concentrated acids, spices, salts etc. to come into extended periods of contact with parts made of stainless steel. Contact with these substances can cause corrosion. Acid fumes produced during tile cleaning can also lead to corrosion.

Do not damage the surface of stainless steel, especially with other metals. Residues of other metals may form chemical compounds which can cause corrosion.

Avoid contact with iron and steel at all times. Extreme corrosion can result when stainless steel comes into contact with iron (e. g. steel wool, wire scraps, iron-fortified water).

Cleaning frequency The unit must be thoroughly cleaned after each use.

Cleaning methods The prescribed cleaning method for routine daily cleaning is to wipe the unit over with a damp cloth.

Persistent soiling may be removed with a brush (synthetic or natural bristles). Any other cleaning method must be approved by BLANCO.

☞ Do not use a steam jet device or high-pressure cleaner.

Cleaning agents Cleaning agents for light soiling:

- Commercial cleaning agent/water solution
- Soft cleaning cloth
- BLANCO microfiber cleaning cloth (use with water only)

Cleaning agents for heavy soiling:

- Commercially available stainless steel cleaning agent, e.g. BLANCOPOLISH

☞ Synthetic parts (e. g. corner guards/impact protection strips) may not be cleaned with stainless steel cleaning agents, as the surface could be scratched.

- Cleaning unit**
- Unplug power plug from the electrical socket and insert it into the power plug retainer.
 - Ensure that the unit interior has cooled down.
 - Clean the unit with the cleaning methods and cleaning agents described above.
 - After cleaning with a stainless steel cleaning agent, rinse with water and rub dry.

Removing areas of corrosion on stainless steel

New areas of corrosion

- Ensure that the power plug is unplugged.
- Remove areas of corrosion with a scouring agent or fine sandpaper.

Older and more severe areas of corrosion

i The cleaning measures described here for older and more severe areas of corrosion are recommendations of the German industry association for home, heating and kitchen technology (Industrieverband Haus-, Heiz- und Küchentechnik e. V. (HKI)).

☞ The cleaning measures for older and more severe areas of corrosion may only be carried out by trained personnel in compliance with the existing regulations.

Warning!

Caustic substances!

The acids used for removing areas of corrosion can cause injuries and also caustic damage to objects (e.g. clothing). Contact with the eyes can cause irreparable impairment of sight. In the worst case, total loss of sight could result.

- Wear protective clothing (protective eyewear, protective gloves etc.).
- Persons not involved in cleaning must be kept at a distance.

- Ensure that the power plug is unplugged.
- Remove areas of corrosion with 2–3% oxalic acid.
- Use 10% nitric acid if cleaning with oxalic acid is unsuccessful.

Maintenance

Having the unit regularly maintained

- ☞ BLANCO recommends regular maintenance of the unit by appropriately trained professionals. Regular maintenance prevents failure of the unit, extends its operating life and contributes to general value retention.
- Have maintenance performed on the unit regularly by appropriately trained professionals.

Checking locking brakes

- ☞ The locking brakes must be checked for effectiveness every time the unit is moved to a new location.
- Lock the locking brakes.
- Try to move the unit while the brakes are locked (do not use excessive force!).
- If the effectiveness of the brakes is not sufficient, have the defective castor replaced immediately by one of the following:
 - In-house, by BLANCO-trained technician
 - Externally, by BLANCO-trained customer service engineer
 - BLANCO Service

Commissioning a periodical electrical safety inspection

- At least once every six months, have a periodical electrical safety inspection carried out by a professional electrician in accordance with the DIN VDE 0702 series of standards.

Check connection cable and power plug

- At least once every six months check the cable and power plug for mechanical damage and signs of excessive aging in accordance with BGV A 3 or the corresponding national regulations.

Repairs

Authorized persons

☞ Repairs may only be carried out by the following service points:

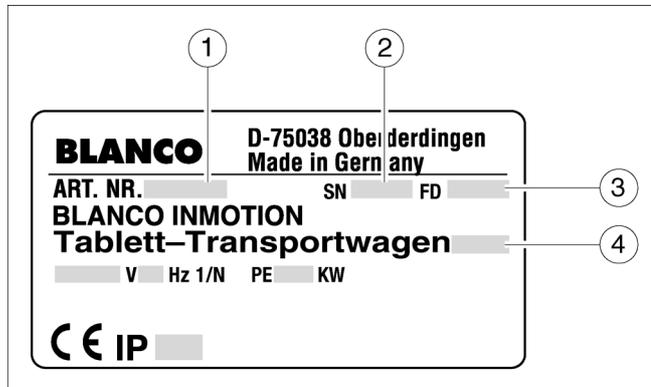
- In-house, by BLANCO-trained technician
- Externally, by BLANCO-trained customer service engineer
- BLANCO Service

Description of problem

In addition to an exact description of the defect, BLANCO Service requires the following information from the rating plate:

- Article number
- Date of manufacture
- Model
- Serial number
- Production order number (not present for standard model)

The rating plate is located near the power line to the unit.



- (1) Article number
- (2) Serial number
- (3) Date of manufacture
- (4) Model

Replacing components

☞ Defective components, including the power cable, may only be replaced through the following service points:

- In-house, by BLANCO-trained technician
- Externally, by BLANCO-trained customer service engineer
- BLANCO Service

Spare parts

The following information is required when ordering spare parts:

- Designation of spare part
- Article number
- Date of manufacture of the unit
- Quantity

☞ Refer to the service CD-ROM and service documentation (available from BLANCO Service).

Address BLANCO CS GmbH + Co KG
Catering Systems
P. O. Box 13 10
75033 Oberderdingen
GERMANY
Phone +49 7045 44 - 81416
Fax +49 7045 44 - 81508
E-mail cs.service@blanco.de
Internet www.blanco.de

Disposal

- Disposing of the unit**
- ▶ Make the unit unusable before disposing of it.
 - ▶ Turn the unit over to a recycling center or electrical refuse collection site.
- ☞ More detailed information regarding disposal and the addresses of disposal facilities will be available from the respective public office (e. g. city or community administration).

Technical data

General data Dimensions and weights – TTW-F Tray Transport Trolley for Gastronorm trays (unit model with 160 mm castor diameter)

Model	Length in mm	Width in mm	Height in mm	Empty weight in kg	Max. load weight in kg
TTW-F 16-115 DBZG	927	722	1325	104	72
TTW-F 16-105 DBZG	927	722	1255	100	72
TTW-F 20-115 DBZG	927	722	1555	117	90
TTW-F 20-105 DBZG	927	722	1465	111	90
TTW-F 24-115 DBDG	1303	722	1325	138	108
TTW-F 24-105 DBDG	1303	722	1255	132	108
TTW-F 30-115 DBDG	1303	722	1555	155	135
TTW-F 30-105 DBDG	1303	722	1465	148	135

Dimensions and weights – TTW-F Tray Transport Trolley for Euronorm trays (unit model with 160 mm castor diameter)

Model	Length in mm	Width in mm	Height in mm	Empty weight in kg	Max. load weight in kg
TTW-F 16-115 DBZE	1017	722	1325	105	72
TTW-F 16-105 DBZE	1017	722	1255	110	72
TTW-F 20-115 DBZE	1017	722	1555	122	90
TTW-F 20-105 DBZE	1017	722	1465	117	90
TTW-F 24-115 DBDE	1438	722	1325	146	108
TTW-F 24-105 DBDE	1438	722	1255	140	108
TTW-F 30-115 DBDE	1438	722	1555	164	135
TTW-F 30-105 DBDE	1438	722	1465	156	135

Dimensions and weights – TTW-F Tray Transport Trolley for Gastronorm and Euronorm trays (unit model with 160 mm castor diameter)

Model	Length in mm	Width in mm	Height in mm	Empty weight in kg	Max. load weight in kg
TTW-F 16-115 DBEU	756	932	1325	92	72
TTW-F 16-105 DBEU	756	932	1255	89	72
TTW-F 20-115 DBEU	756	932	1555	103	90
TTW-F 20-105 DBEU	756	932	1465	98	90
TTW-F 32-115 DBZU	1337	932	1325	148	144
TTW-F 32-105 DBZU	1337	932	1255	142	144
TTW-F 40-115 DBZU	1337	932	1555	165	180
TTW-F 40-105 DBZU	1337	932	1465	158	180

Number of unit compartments and tray capacity

Model	Number of unit compartments	Capacity GN = Gastronorm EN = Euronorm
TTW-F 16-115/105 DBEU	1	16 GN or 16 EN trays
TTW-F 20-115/105 DBEU	1	20 GN or 20 EN trays
TTW-F 16-115/105 DBZG	2	16 GN trays
TTW-F 20-115/105 DBZG	2	20 GN trays
TTW-F 16-115/105 DBZE	2	16 EN trays
TTW-F 20-115/105 DBZE	2	20 EN trays
TTW-F 32-115/105 DBZU	2	32 GN or 32 EN trays
TTW-F 40-115/105 DBZU	2	40 GN or 40 EN trays
TTW-F 24-115/105 DBDG	3	24 GN trays
TTW-F 30-115/105 DBDG	3	30 GN trays
TTW-F 24-115/105 DBDE	3	24 EN trays
TTW-F 30-115/105 DBDE	3	30 EN trays

Temperature, compartment interior

+30 °C to +75 °C

Distance between support ledges

105 mm or 115 mm (depending on model)

Load-bearing capacity

Component	Permitted area load in kg
Unit top	25

Electrical data Connected loads

Model	Voltage	Rating
TTW-F 16-115/105 DBEU	220 to 240 V AC, 50 to 60 Hz	900 W
TTW-F 20-115/105 DBEU	220 to 240 V AC, 50 to 60 Hz	900 W
TTW-F 16-115/105 DBZG	220 to 240 V AC, 50 to 60 Hz	1050 W
TTW-F 20-115/105 DBZG	220 to 240 V AC, 50 to 60 Hz	1050 W
TTW-F 16-115/105 DBZE	220 to 240 V AC, 50 to 60 Hz	1050 W
TTW-F 20-115/105 DBZE	220 to 240 V AC, 50 to 60 Hz	1050 W
TTW-F 32-115/105 DBZU	220 to 240 V AC, 50 to 60 Hz	1800 W
TTW-F 40-115/105 DBZU	220 to 240 V AC, 50 to 60 Hz	1800 W
TTW-F 24-115/105 DBDG	220 to 240 V AC, 50 to 60 Hz	1400 W
TTW-F 30-115/105 DBDG	220 to 240 V AC, 50 to 60 Hz	1400 W
TTW-F 24-115/105 DBDE	220 to 240 V AC, 50 to 60 Hz	1400 W
TTW-F 30-115/105 DBDE	220 to 240 V AC, 50 to 60 Hz	1400 W

Protection type

IP X4 (the unit is protected against splashed water in accordance with DIN EN 60529.)

Environment Environmental conditions – operation

Temperature range: +15 °C to +32 °C

Relative humidity: Without condensation

Environmental conditions – storage, transportation

Temperature range: -10 °C to +40 °C

Relative humidity: Without condensation

Material

Unit: Stainless steel

Ordering information

TTW-F 16-115 DBZG	Article number:	366 448, 564 117
TTW-F 16-105 DBZG	Article number:	366 448
TTW-F 16-115 DBZE	Article number:	366 444, 564 107
TTW-F 16-105 DBZE	Article number:	366 444
TTW-F 16-115 DBEU	Article number:	366 452, 564 102
TTW-F 16-105 DBEU	Article number:	366 452
TTW-F 20-115 DBZG	Article number:	366 449, 564 138
TTW-F 20-105 DBZG	Article number:	366 449
TTW-F 20-115 DBZE	Article number:	366 445, 564 128
TTW-F 20-105 DBZE	Article number:	366 445
TTW-F 20-115 DBEU	Article number:	366 453, 564 123
TTW-F 20-105 DBEU	Article number:	366 453
TTW-F 24-115 DBDG	Article number:	366 450, 564 155
TTW-F 24-105 DBDG	Article number:	366 450
TTW-F 24-115 DBDE	Article number:	366 446, 564 150
TTW-F 24-105 DBDE	Article number:	366 446
TTW-F 30-115 DBDG	Article number:	366 451, 564 163
TTW-F 30-105 DBDG	Article number:	366 451
TTW-F 30-115 DBDE	Article number:	366 447, 564 158
TTW-F 30-105 DBDE	Article number:	366 447
TTW-F 32-115 DBZU	Article number:	366 454, 564 166
TTW-F 32-105 DBZU	Article number:	366 454
TTW-F 40-115 DBZU	Article number:	366 455, 564 176
TTW-F 40-105 DBZU	Article number:	366 455
Operating instructions	Document number:	154 326

Accessories

Gastronorm/European norm trays	Article numbers:	↪ BLANCO price list
Dishes	Article numbers:	↪ BLANCO price list
Cloches	Article numbers:	↪ BLANCO price list
Eutectic plates	Article number:	↪ BLANCO price list
Menu cards	Article number:	↪ BLANCO price list
BLANCO microfiber cleaning cloth	Article number:	126 999
Stainless steel cleaning and care agent BLANCOPOLISH	Article number:	511 895
Service CD	Article number:	↪ BLANCO Service

Standards, guidelines, inspection seal

DIN 18865-9: Large kitchen devices, production systems, cabinet interiors in standard and hygienic models.

DIN 18867-7: Equipment for commercial kitchens – Mobile equipment – Food transportation/distribution trolleys

DIN 66075-3: Food service appliances; insertable trays

DIN EN 60529: Protection types provided by enclosures (IP code).

EN 60335-1: Safety of household and similar electrical appliances; Part 1: General requirements.

EN 60335-2-49: Safety of household and similar electrical appliances; Part 2: Special requirements for electrical heating cabinets for commercial use.

BGV A 3 (VBG 4): Accident prevention regulations for electrical units and devices.

BGR 111 (ZH1/37): Rules on safety and health protection for working in kitchens.



DIN EN ISO 9001: BLANCO is certified in accordance with DIN EN ISO 9001.



HKI quality mark: Collective mark of the German industry association for home, heating and kitchen technology (Industrieverband Haus-, Heiz- und Küchentechnik e. V.) This mark documents the particularly high standard of the unit with regard to quality, service and ecology.

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BLANCO