

**700.455****700.485****Bedienungsanleitung****Kühlschränke für 2/1 GN Roste**
Seite 3 bis 19**D/A/CH***** Instruction manual****Refrigerators for 2/1 GN grids**
from page 21 to 37**GB/UK****Mode d'emploi****Réfrigérateurs pour 2/1 GN grilles**
de page 39 à page 55**F/B/CH****Gebruiksaanwijzing****Koelkasten voor 2/1 GN rooster**
blz. 57 t/m 73**NL/B****Instrukcja obsługi****Szafy chłodnicze na ruszty 2/1 GN**
strony od 75 do 91**PL**

**Keep this instruction manual
ready to hand at the product!**

1. General Information	22
1.1 Information about the instruction manual	22
1.2 Key to symbols	22
1.3 Liability and Warrantees	23
1.4 Copyright protection	23
1.5 Declaration of conformity	23
2. Safety	24
2.1 General information	24
2.2 Safety instructions for use of the device	24-25
2.3 Intended use	25
3. Delivery, packaging and storage	26
3.1 Delivery check	26
3.2 Packaging	26
3.3 Storage	26
4. Technical data	27
5. Installation and operation	27
5.1 Safety instructions	27-28
5.2 Installation and connection	28-29
5.3 Operating	29-33
6. Cleaning and maintenance	33
6.1 Safety advice	33
6.2 Cleaning	33-34
6.3 Safety instructions for maintenance	34
7. Possible Malfunctions	35-36
8. Waste disposal	37

Bartscher GmbH
Franz-Kleine-Str. 28
D-33154 Salzkotten
Germany

phone: +49 (0) 5258 971-0
fax: +49 (0) 5258 971-120

1. General information

1.1 Information about the instruction manual

This instruction manual contains information about the installation, operation and maintenance of the device and should be consulted as an important source of information and reference guide.

Awareness of the safety instructions and instructions for use in this manual will ensure the safe and correct use of the device.

In addition to the information given here, you should comply with any local Health and safety Controls and generally applicable safety regulations.

The instruction manual forms part of the product and should be kept near the device and easily accessible for anyone carrying out the installation, servicing, maintenance or cleaning.

1.2 Key to symbols

In this manual, symbols are used to highlight important safety instructions and any advice relating to the device. The instructions should be followed very carefully to avoid any risk of accident, personal injury or material damage.



WARNING!

This symbol highlights hazards, which could lead to injury.

Please follow the instructions very carefully and proceed with particular attention in these cases.



WARNING! Electrical hazard!

This symbol draws attention to potential electrical hazards. If you do not follow the safety instructions, you may risk injury or death.



CAUTION!

This symbol highlights instructions, which should be followed to avoid any risk of damage, malfunctioning and/or breakdown of the device.



NOTE!

This symbol highlights tips and information, which have to be followed for an efficient and trouble-free operation of the device.

1.3 Liability and Warrantees

All the information and instructions in this manual take into account standard safety regulations, current levels of technical engineering as well as the expertise and experience we have developed over the years.

The instruction manual was translated with all due care and attention. However, we do not accept liability for any translation errors. The German version of this instruction manual is definitive.

If the delivery consists of a special model, the actual scope of delivery may differ from the descriptions and illustrations in this manual. This is also the case for special orders or when the device has been modified in line with new technology. If you have any questions, you should contact the manufacturer.



NOTE!

Read the instruction manual carefully before using the device. The manufacturer does not accept liability for any damage or malfunction resulting from not following the instructions for use.

The instruction manual should be kept near the device, easily accessible for anyone wishing to work with or using it. We reserve the right to make technical changes for purposes of developing and improving the useful properties.

1.4 Copyright protection

The instruction manual including any texts, drawings, images or other illustrations is copyright. No part of this publication may be reproduced, transmitted or used in any form or by any means without permission in writing from the manufacturer. Any person who commits any unauthorized act in relation to this publication shall be liable to claims for damages. All rights reserved.



NOTE!

The contents, texts, drawings, pictures and any other illustrations are copyright and subject to other protection rights. Any person unlawfully using this publication is liable to criminal prosecution.

1.5 Declaration of conformity

The device complies with the current standards and directives of the EU.

We certify this in the EC declaration of conformity.

If required we will be glad to send you the according declaration of conformity.

2. Safety

This section provides an overview of all important safety aspects.

In addition every chapter provides precise safety advice for the prevention of dangers which are highlighted by the use of the above mentioned symbols.

Furthermore, attention should be paid to all pictograms, markers and labels on the device, which must be kept in a permanent state of legibility.

By following all the important safety advice you gain an optimal protection against all hazards as well as the assurance of a safe and trouble-free operation.

2.1 General Information

This device is designed in accordance with the presently applicable technological standards. However, the device can pose a danger if handled improperly and inappropriately.

Knowing the contents of the instruction manual as well as avoiding mistakes and thus operating this device safely and in a fault-free manner is very essential to protect yourselves from the hazards.

To prevent hazards and to ensure optimum efficiency, no modifications or alterations to the device that are not explicitly approved by the manufacturer may be undertaken.

This device may only be operated in technically proper and safe condition.

2.2 Safety instructions for use of the device

The specifications regarding the industrial safety are based on the Regulations of the European Union applicable at the time of manufacturing the device.

If the device is used commercially, the user is obliged to ensure that the said industrial safety measures concur with the state of the rules and regulations applicable at the time in question for the entire period of use of the device and to comply with the new specifications.

Outside the European Union, the industrial safety laws applicable at the place of installation of the device and the regional territorial provisions must be complied with.

Besides the industrial safety instructions in the instruction manual, the general safety and accident prevention regulations as well as environment protection regulations applicable for area of application of the device must be followed and complied with.



CAUTION!

- The device is not intended for use by individuals (including children) with physical or mental disabilities, insufficient experience, and/or insufficient knowledge unless such persons are under the care of a person responsible for their safety or have received instructions regarding appropriate use of the device.
- Children should be observed to ensure that they are not playing with the device.
- Preserve this manual safely. When passing on/selling the device to a third party, the manuals must be handed over along with the device.
- Every person using the device must act in accordance to the manuals and under consideration of the safety advice.
- The device is to be used indoors only.

2.3 Intended use

Safe operation is only guaranteed when using the device for its intended purpose.

Any technical interventions, as well as assembly and maintenance are to be made by a qualified customer service only.

The refrigerator is intended **only** for cooling and storage of food products and beverages.



CAUTION!

Any use going beyond the intended purpose and/or any different use of the device is forbidden and is not considered as conventional.

Any claims against the manufacturer or his authorized representative as a consequence of experiencing damages resulting from unconventional use are impossible.

The operator is liable for all damages resulting from inappropriate use.

3. Transport, packaging and storage

3.1 Delivery check

Please check the delivery upon completeness and transport damage immediately after receipt.

In case of visible damage do not accept or accept the delivery with reservation only.

Note the extent of damage on the carrier's bill of delivery. Trigger off the complaint.

Hidden damages should be reclaimed immediately after notice, as claims for damages can only be asserted within the effective period for complaints.

3.2 Packaging

Please do not throw away the covering carton of your device as it might be useful for storage purposes, when moving or, in case of damages, when the device must be sent back to a repair center. The outer and inner packing material should be removed completely from the device before installation.



NOTE!

If you liked to dispose the packing, consider the regulations applicable in your country. Supply re-usable packing materials to the recycling.

Please inspect the device upon completeness. In case any part is missing please contact our customer service center immediately.

3.3 Storage

Keep the package closed until installation and under consideration of the outside indicated positioning- and storage markings.

Packages should be stored under consideration of the following:

- Do not store outdoors.
- Keep it dry and dust-free.
- Do not expose it to aggressive media.
- Do not expose it to direct sunlight.
- Avoid mechanical shocks and vibration.
- In case of longer storage (> 3 months) make sure you check the state of the packaging and the parts regularly.
If required refresh or renew.

4. Technical data

Name	Refrigerators for 2/1 GN grids	
Article no.:	700.455	700.485
Casing:	CNS	
Gross volume:	700 litres	1400 litres
Coolant:	R134a	
Temperature range:	0 to +8°C	
Ambient temperature:	up to max. 32 °C	
Power:	0,484 kW / 230 V	0,704 kW / 230 V
Dimensions (mm):	W 710 x D 810 x H 2010	W 1400 x D 810 x H 2010
Weight:	90.0 kg	183.0 kg
Equipment:	3 grids	6 grids

We reserve the right to make technical changes!

5. Installation and operation

5.1 Safety instructions



WARNING! Electrical hazard!

The device must only be connected to a properly installed single socket with protective contact.

Never yank cord to disconnect from outlet.

Cable must not touch any hot parts.

- See that the cable does not touch any heat sources or sharp edges. Do not let the cable dangle over the counter edge.
- Do not use the device in case it does not function properly, has been damaged or dropped.
- Do not use any accessory or spare parts that have not been recommended by the manufacturer. These can be dangerous for the user or lead to damages of the device or personal injury, and further, the warranty expires.
- Do not lay the cable over carpets or heat insulations. Do not cover the cable. Keep away the cable from operating range and do not dunk it into water.
- Do not move or tilt the device when in operation.



WARNING! Hazard via electrical current!

Avoid contact between the device and water. Do not allow the water to be affected by rain, dripping water or other forms of moisture. This may lead to damage to the device or electric shock.

- Do not keep heavy, poisonous or rusty objects in the refrigerator.
- Take caution not to damage any part of the cooling system (compressor, etc.) to avoid a coolant leak.



WARNING!

If coolant does leak from the cooling system, remove the device's plug from the power source and call the customer service centre.



WARNING! Hazard via electrical current!

The device can cause injuries due to improper installation!

Before installation the local power grid specification should be compared with that of the device (see type label).

Connect the device only in case of compliance!

Take note of the security advice!

5.2 Installation and connection



ATTENTION!

Installation and maintenance operations may only be performed by qualified professionals!

- Unpack the device and remove packaging.
- Leave the device on its pallet.
- Raise the refrigerator using a pallet jack and place it where it is intended to be located.
- Do not push or pull the refrigerator as it may tilt, causing damage to the external casing and adjustable legs.
- When the refrigerator is placed in its intended location, remove the pallet. Take care not to hit the device.
- Place the device in a flat, secure place that will support its weight.
- Set up the device using the adjustable legs. Use a level as needed. Every leg must touch the floor, as otherwise the door may open and close improperly.

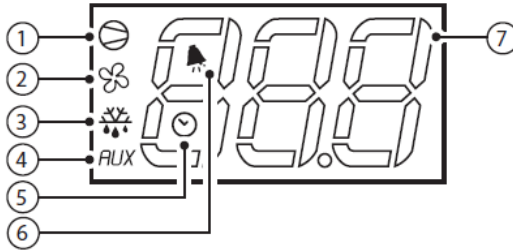
- Remove the protective foil from the device.
- Not **at any time** should you place the device on an inflammable surface.
- **Do not** place the device in the vicinity of open sources of fire, electric cookers, furnaces or other sources of heat such as e.g., in places exposed to direct sunlight. The heat can damage the surface of the device, as well as have a negative effect on the cooling power and increase the consumption of energy.
- To avoid damage to the compressor, do not tilt the device to an angle greater than 45° during setup or transport. Be careful when touching the condenser and doors, as damage to them will negatively impact the working of the device.
- Place the device in such a manner that there is a minimum of 10 cm between it and other objects, including walls, in order to ensure proper air circulation.
- Place the device in such a manner that the ventilation ducts are neither blocked or covered.
- Do not place the device where humidity or temperature are high as the device may be damaged.
- Before the first use the device should stand for at least 2 hours before it is connected to the power source.
- Do not drill holes in the device nor mount other objects to it.
- The electrical circuit in the socket must be secured to at least 16A. Only connect the device directly to the wall socket; do not use any extension cords or power strips.
- Place the device so that the plug is easily accessible and can be quickly removed from its socket in case of necessity.

5.3 Operating

Prior to first use

- Wash the device after unpacking and before connecting to an electrical outlet (see **6.2 Cleaning**).
- Connect the device to a single, grounded socket.
- Turn the device on using the **ON/OFF** switch at the front.
- Prior to placing food products and beverages inside the device, allow the refrigerator to reach the desired temperature.

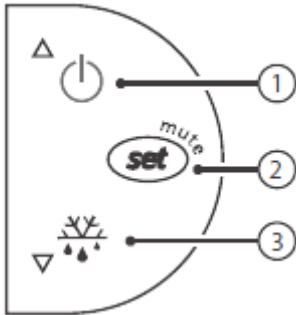
Digital display



Display

	LED	Function	Normal mode			Start-up
			ON	OFF	Flash	
①		Compressor	ON	OFF	Required	ON
②		Ventilator	ON	OFF	Required	ON
③		G defrost	ON	OFF	Required	ON
④	<i>AUX</i>	Auxiliary jack	Active	Inactive	-	ON
⑤		RTC timer	RTC timer is active (tEN=1) and min. 1 programmed time cycle	No RTC timer or RTC timer is inactive (tEN=0) or time cycle is not programmed		ON
⑥		Alarm	Alarm active	Alarm inactive	-	ON
⑦		Digital display	Contains three digits with comma and break - 199...999. See parameters /4, /5, /6 for sensor display, value in °C/°F and comma			

Button functions



	Normal mode		Start-up	
	Press once	Press together		
①	Over 3 seconds: ON/OFF	Together with ③: Activate/deactivate constant running mode	-	
②	- 1 sec.: display/ setting desired values - Over 3 sec.: access to parameter settings (enter 22) - stop alarm (buzzing)	-	Pressed for 1 sec.: RESET EZY	Pressed together (② and ③): RESET parameters
③	Over 3 sec.: Start/stop defrost	Together with ①: Start/stop constant running mode	Pressed for 1 sec. : Information about product	

Setting desired values

To regulate and set desired values:

- press **set** for one second: set value will begin flashing;
- to raise or lower value, press Δ or ∇ ;
- confirm new value by pressing **set** .

Manual defrost

Besides automatic defrost, manual defrost is available to be activated by pressing ∇ for over 3 seconds.



NOTE!

To gain access to additional settings or to change parameters, such settings are located in the temperature settings guide. If not, contact service personnel.

Tips for the user

- Keep food products and beverages in hermetically-sealed containers in order to protect their aroma and prevent mixing of scents in the refrigerator.
- When placing articles inside the refrigerator, remember to keep sufficient distance between food products and the device's internal walls to allow sufficient air circulation.
- More energy is used and damage to the device is more common when larger amounts of products are stored, or when the door is held open for longer periods of time.
- To reduce loss of cold, keep the door open for as short a time as possible. Also, do not open the door too frequently.
- To avoid unpleasant odours inside the refrigerator, observe best-by dates on food products.
- Cool food products and beverages to the appropriate storage temperature prior to putting in the refrigerator.
- Storage of uncooled food products reduces the device's effectiveness and may cause such articles to spoil faster. Avoid storing food products in uncooled spaces, to prevent loss of cold air when storing articles in the refrigerator.

- In the case of a sudden power outage lasting up to 20 minutes, do not open the device's door to avoid loss of cold.
- If the power outage lasts longer than 20 minutes, check all food products to ensure they have not reached critical temperature. The highest temperature at which products will not spoil is + 10°C. As mentioned above, avoid opening the device's door.
- After a power outage or after removing the plug from its socket, do not connect the device to an outlet for a minimum of 5 minutes.

6. Cleaning and maintenance

6.1 Safety advice

- Before beginning with repair or cleaning works make sure the device has been disconnected from power socket (pull the power plug!!!) and has cooled down.
- Do not use any acid agents and make sure no water ingresses the device.
- To protect yourself from electric shock, **never** immerse the device, its cables and the plug in water or other liquids.



CAUTION!

The device is not suited for direct washing via water jets. Therefore, you must not use any kind of pressure water jet for cleaning the device!

6.2 Cleaning

Cleaning the device

- Clean the device regularly.
- Use warm water and a mild cleaning agent for washing.
- Dry the device thoroughly after cleaning.
- Wash the device's accessories with a mild cleaning agent and dry thoroughly. Ensure accessories are completely dry prior to replacing them in the device.
- Wipe down the device's exterior with a soft, moist cloth.
- Connect the device to a single grounded socket.



ATTENTION!

Never use hot water to wash the device!

Never use harsh cleaning chemicals such as scouring powder, substances containing alcohol or alkalides, thinners, petrol, or other similar substances which may damage elements made of artificial substances and/or paint.

If the refrigerator is to be unused for a longer period of time:

- Remove the plug from its socket;
- Remove all food products from the refrigerator;
- Wash the interior and exterior of the device. Remove all water and mould spots;
- Leave the device's door open to allow it to dry thoroughly.

Cleaning the condenser

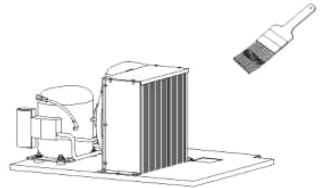
- Clean the condenser at least once a month.



NOTE!

A dirty condenser has a negative impact on the device's functioning and increases energy use!

- Disconnect the device prior to cleaning (remove plug!).
- Use a vacuum or hard-bristle brush for cleaning.
- Wear protective gloves while cleaning.



WARNING! Danger of burns!

***The compressor's surface may be very hot when in use.
Do not touch the compressor with bare hands.***

6.3 Safety instructions for maintenance

- Check the mains connection cable for damage from time to time. Never operate the device when the cable is damaged. A damaged cable must immediately be replaced by customer service or a qualified electrician to avoid dangers.
- In case of damage or malfunction, please contact your stockist or our customer service centre. Pay attention to the troubleshooting tips in pt. 7.
- Only a qualified technician and using original spare parts and accessories should carry out repairs and maintenance of the device. **Do not attempt to repair the device yourself.**

7. Possible Malfunctions

Problem	Cause	Solution
No cooling.	<ul style="list-style-type: none"> • Plug not in socket. • Damaged circuit breaker. • Power interruption 	<ul style="list-style-type: none"> • Insert plug into socket. • Check power source. • Check power source.
Insufficient cooling	<ul style="list-style-type: none"> • Direct sunlight or heat source nearby. • Poor air circulation around refrigerator. • Door not closed or held open for too long. • Damaged or misshaped door seals. • Too many products inside or distance between products is too small. • Improperly set temperature. 	<ul style="list-style-type: none"> • Remove heat source. • Ensure sufficient distance between wall and other objects. • Close door, keep open as short a time as possible. • Contact sales agent • Ensure proper distance between products, remove unneeded articles. • Set temperature.
Refrigerator making unusual or very loud sounds.	<ul style="list-style-type: none"> • Refrigerator on uneven surface. • Refrigerator touches wall or other object. • Door is improperly closed. 	<ul style="list-style-type: none"> • Place refrigerator on even surface. • Ensure proper distance to wall and other objects. • Close door.

The above problems are only examples. If these or other similar problems arise, disconnect the unit immediately and stop using it. Contact a qualified repairman or the producer, in order to examine and repair the unit.

The following are neither errors nor malfunctions:

- The electric humming of the motor when the compressor is working. This hum is slightly louder when it begins working.
- The sound of running water. This is made during normal use of the unit: it is coolant flowing through the unit.

Error messages on the digital display

Alarm code	Error	Assistance
E0	Regulation sensor error: <ul style="list-style-type: none"> • Sensor not working: Sensor signal interrupted or appears for a short time; • Sensor not working with unit. The message E0 appears when one alarm is active, (temperature value is not displayed), and flashes when other alarm signals show or when the measurement value of the second sensor is displayed.	Contact a sales agent.
dOr	Open door	Check multifunction jacks and parameters A4 and A7. Contact a sales agent
Ed	Last defrost cycle ended as a result of max. time being exceeded, and not because of normal end of cycle	Check parameters dt, dP and d4; Check if defrost conducted properly. The message will disappear when the next defrost cycle finished normally.
dF	Defrost cycle completed: <ul style="list-style-type: none"> • this is not an error message, but a message that the unit is in the middle of a defrost cycle. It only appears when parameter d6= 0. 	Contact a sales agent
CHt	Dirty condenser alarm: <ul style="list-style-type: none"> • check parameters A4, Ac, AE and Acd. 	Contact a sales agent

8. Waste disposal

Discarding old devices

At the end of its service life the discarded device has to be disposed in accordance with the national regulations. It is advisable to contact a company which is specialized in waste disposal, or just contact the local disposal service in your community.



WARNING!

To exclude any abuse and the dangers involved make the waste device unfit for use before disposal. For that purpose disconnect device from mains supply and remove mains connection cable from the device.



NOTE!



For the disposal of the device please consider and act according to the national and local rules and regulations.

Bartscher GmbH
Franz-Kleine-Str. 28
D-33154 Salzkotten
Germany

phone: +49 (0) 5258 971-0
fax: +49 (0) 5258 971-120