saro
Gastro-Products

Operating Manual

Chest Freezer Model BD 401 S, 501 S, 601 S

Item-No.: 323-4600, 323-4605, 323-4610



English - Translation

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Dear Customer,

We congratulate you on your new SARO chest freezer.

The product you have purchased has been designed for commercial use in restaurants, hotels, cafés, canteens, and supermarkets.
It is intended for the reliable freezing and long-term storage of food products. The freezer chest is particularly suitable for maintaining products at low temperatures, ensuring freshness and quality over extended periods.

Please read this operating manual carefully before putting the appliance into operation.

We wish you much success and satisfaction with your new SARO product.

SCOPE OF DELIVERY

- 1 Operating Manual
- 1 Chest freezer
- 2 Baskets

STANDARDS AND DIRECTIVES

The device complies with the current EU standards and directives:
Machinery Directive – MD 2006/42/EC,
Electromagnetic Compatibility Directive – EMC 2014/30/EU,
RoHS Directives 2011/65/EU and 2015/863/EU,

Ecodesign requirements according to Regulation (EU) 2015/1095 and
Energy labelling according to Regulation (EU) 2015/1094.

The corresponding Declaration of Conformity can be provided upon request.

TECHNICAL OVERVIEW

Chest freezer			
Model	BD 401 S	BD 501 S	BD 601 S
Order No.	323-4600	323-4605	323-4610
Material	Housing: Steel, white powder-coated Interior: Aluminium Lid: Stainless steel		
Door(s)	1		
Lock	Yes		
Baskets	2		
On/Off switch	Yes		
Connection setup	Ready top lug in with Schuko plug		
Temperature control	Digital temperature control (DIXELL)		
Insulation	90 mm		
Cooling type	Static cooling		
Defrosting	Manual defrost		
Feet	4 rollers, H 83 mm		
Temerpature range	<-18 °C		
Gross capacity	380 litres	516 litres	584 litres
Climate class	Suitable for climate class 5, heavy-duty appliance		
Refrigerant type/quantity	R600 a (GWP 3) / 0,115 kg 	R600 a (GWP 3) / 0,140 kg 	R600 a (GWP 3) / 0,140 kg 
Connection	230 V / 50 Hz / 0,170 kW	230 V / 50 Hz / 0,190 kW	230 V / 50 Hz / 0,190 kW
Internal dimensions	W 1246 x D 501 x H 675,5 mm	W 1645 x D 501 x H 675,5 mm	W 1846 x D 501 x H 675,5 mm
External dimensions	W 1435 x D 730 x H 970 mm	W 1760 x D 730 x H 970 mm	W 2035 x D 730 x H 970 mm
Regulation for energy labeling	*VO (EU) 2019/2016 – Household Refrigerating Appliances* Group: *Domestic/Commercial Freezer Chests*		
Energy efficiency class/ EEI	E (Spectrum A bis G) / 89,80 % 	E (Spectrum A bis G) / 90,50 % 	E (Spectrum A bis G) / 85,20 % 
Energy consumption per year/day	231 kWh / 0,632 kWh	271 kWh / 0,742 kWh	273 kWh / 0,748 kWh
Net/Gross weight	71 kg / 86 kg	89 kg / 105 kg	97 kg / 117 kg
GTIN [EAN-Code]	4017337071135	4017337071142	4017337071159

SYMBOL EXPLANATIONS



WARNUNG!
Dieses Symbol kennzeichnet Gefahren, die zu Verletzungen führen können. Halten Sie die angegebenen Hinweise zur Arbeitssicherheit unbedingt genau ein und verhalten Sie sich in diesen Fällen besonders vorsichtig.

WARNING!
This symbol indicates hazards that may cause injuries. Always follow the specified safety instructions precisely and exercise extra caution in these situations.



WARNUNG: GEFAHR DURCH ELEKTRISCHEN STROM!
Dieses Symbol macht auf gefährliche Situationen durch elektrischen Strom aufmerksam. Bei Nichtbeachten der Sicherheitshinweise besteht Verletzungs- oder Lebensgefahr!

WARNING: DANGER OF ELECTRIC SHOCK!
This symbol warns of hazardous situations caused by electric current. Failure to follow the safety instructions may result in injury or death!



WARNUNG: HEISSE OBERFLÄCHE - VERBRENNUNGSGEFAHR
Dieses Symbol weist auf die heiße Oberfläche des Gerätes, während des Betriebes und danach hin. Verbrennungsgefahr bei Nichtbeachten!

WARNING: HOT SURFACE - RISK OF BURNS
This symbol indicates the hot surface of the device during and after operation. Risk of burns if not observed!



WARNUNG: FEUERGEFÄHRLICHE STOFFE - VERBRENNUNGSGEFAHR
Dieses Symbol weist darauf hin, dass Gefahren aufgrund von feuergefährlichen Stoffen für Leben und Gesundheit von Personen bestehen. Verbrennungsgefahr bei Nichtbeachten!

WARNING: FLAMMABLE SUBSTANCES - RISK OF BURNS
This symbol indicates that flammable substances pose a danger to life and health. Risk of burns if not observed!

GENERAL INSTRUCTIONS

- Keep this operating manual handy near the appliance.
- The manufacturer/dealer cannot be held responsible for any damage resulting from failure to follow this manual.
- Failure to follow this manual will void the safety of the appliance.
- If the appliance is passed on to third parties, this operating manual must be included.
- This appliance must not be operated by children or persons with reduced physical, sensory, or mental capabilities, as they may not recognize the hazards of using electrical and/or refrigeration appliances, which could lead to accidents, fire, explosions, or property damage.
- After unpacking the appliance, make sure everything is in perfect condition. If you discover any damage, do not connect the appliance to the power supply; instead, contact your dealer.
- Check whether all components listed in the scope of delivery are present. If not, contact your dealer.
- Keep the appliance packaging. Only in its original packaging can the appliance be transported safely (e.g. for repair purposes, during relocation, etc.). Please note that all packaging components (plastic bags, cardboard, styrofoam parts, etc.) can be dangerous for children and must not be stored within their reach.
- If storing the packaging is not possible, separate the different packaging materials and take them to the nearest collection point for proper disposal.
- Do not use the appliance outdoors in the rain or in damp rooms.
- Do not operate the appliance unattended.
- Observe applicable accident prevention regulations and general safety standards for the area of use.
- Install the appliance in a dry, well-ventilated location on a level, stable surface.
- Ensure at least 10 cm of clearance between the rear of the display cabinet and the wall. Otherwise, the required cooling performance cannot be guaranteed.
- Do not install the appliance near heat sources such as heaters, stoves, ovens, open flames, or in direct sunlight, as this will affect the cooling performance.
- Ventilation slots must always be kept clear and must not be covered or obstructed.
- Before commissioning, observe the recommended ambient temperatures (climate class) for optimal cooling performance.
- Before connecting to the power supply and before commissioning, clean the appliance thoroughly as described under “Cleaning.”
- Before connecting the appliance, make sure that a grounded socket (Schuko) with 230 volts is available and that this matches the information on the rating plate. Power sources other than those indicated on the rating plate may cause overheating or defects in the appliance.
- Do not drill or pierce holes in the interior or exterior of the appliance, as this could damage the cooling system.
- For hygiene reasons, daily cleaning is recommended during operation.
- Always disconnect the appliance from the power supply before cleaning. Switch off the appliance first if it has an on/off switch or a thermostat with an “off” setting. Do the same if the appliance is not used for an extended period.
- The manufacturer/dealer cannot be held responsible for any damage resulting from failure to follow this manual. The safety of the appliance will also no longer be guaranteed.
- In the event of a malfunction/failure, disconnect the appliance from the power supply and contact your dealer. Repairs will be carried out with original spare parts by or on behalf of the dealer.

SAFETY INSTRUCTIONS

- Improper use and mishandling can lead to malfunctions of the appliance and injuries to the user.
- This appliance is neither suitable nor intended for storing medicines or flammable, combustible, or explosive substances.
- Observe the applicable accident prevention regulations and general safety standards for the area of use.
- Ensure a stable position on a dry, slip-resistant surface suitable for the appliance's weight, and install it in a well-ventilated location.
- Do not expose the appliance to direct sunlight, do not place it near heat sources (heater, stove, oven, open fire), and do not place it on hot surfaces, as this will affect cooling performance.
- Do not store flammable or explosive substances near the appliance.



- Do not carry out work with flammable substances near the appliance (such as paint or spray paint). Otherwise, fire or explosion may occur.
- The appliance requires sufficient space for air circulation and cooling: 10 cm on each side and at the back.
- Do not place heavy objects, loads, or liquids on the appliance.
- Ensure that the appliance's air inlet and outlet openings are always free of dirt. Check them regularly and remove any dust deposits using a vacuum cleaner.
- Do not cover or block the air openings.
- Do not tilt the appliance more than 45 degrees.
- Before connecting to your power supply, check whether the type of current and mains voltage correspond to the information on the rating plate. Operation is only possible if they match, in order to avoid accidents or defects.



- Do not use adapters, multiple sockets, or extension cords; otherwise, cables/wires may quickly overheat, especially if other appliances are connected. This increases the risk of fire.
- Do not move the appliance while it is in operation.
- Before moving the appliance, switch it off (if a switch is available) and unplug it.
- Always unplug by pulling on the plug housing, never the cable.
- Make sure the appliance does not tip over when being moved, as this may cause injuries.
- Once the appliance is set up again, wait 2 hours before switching it back on.
- If transported over a longer distance, allow the appliance to stand for approx. 24 hours before commissioning to prevent damage or accidents.
- After a power failure or after unplugging briefly, switch the appliance off, wait 5 minutes, then plug it back in and restart it.
- Do not let the power cord hang over sharp edges, do not crush it, and keep it away from hot objects and open flames.
- Ensure the cord cannot be pulled accidentally or tripped over.
- Check the cord regularly. If damaged, e.g. crushed, it must be replaced by a qualified technician.
- Do not touch the appliance, cord, or plug with wet or damp hands.
- Caution! The appliance remains live as long as it is connected to the mains.
- Protect the appliance from moisture.
- Do not clean the appliance with a water jet.
- The appliance must not be immersed in water or other liquids or splashed with liquids. If the appliance does get wet, unplug it immediately and have it inspected by a qualified technician before reuse. Danger of electric shock!
- A damaged appliance must not be used! Disconnect it from the mains and contact your dealer.



- Never attempt to open or repair the appliance yourself. Danger to life!
- Do not touch the compressor, as it may cause burns.
- Do not drill or puncture the appliance, neither from outside nor inside.
- Do not install other devices in the refrigeration unit and do not attach foreign objects.
- Do not interfere with the refrigeration circuit! This must only be done by a professional. Refrigerants R600a and R290 are environmentally friendly, but they are colorless, almost odorless, flammable gases; heavier than air; and in high concentrations narcotic and asphyxiating.
- Repairs must be carried out by qualified personnel using original spare parts.
- Always disconnect the appliance from the mains before cleaning and also during longer periods of non-use.
- Keep the door open only briefly to maintain the internal temperature.

DEVICE INSTALLATION

Place the appliance in a dry and well-ventilated room. Ensure a stable position on a dry, slip-resistant surface.

Position the appliance at least 10 cm away from the wall at the back to allow sufficient air circulation at all times. Leave at least 30 cm of space above the appliance and 10 cm on each side.

Performance and energy consumption may be affected by ambient temperature or direct sunlight. Therefore, do not expose the appliance to direct sunlight and do not place it near a stove, radiator, or any other heat source.

Ensure that the power plug is always easily accessible and can be disconnected from the mains without difficulty.

Arrange the appliance's shelves so that the spacing corresponds to the height of your stored goods.



After delivery or transportation of the appliance, do not connect it to the power supply until it has been left to stand for at least 24 hours. This is absolutely necessary to allow the refrigerant to settle in the compressor.

ELECTRICAL CONNECTION

After long transportation, the appliance should only be put into operation after 24 hours, and likewise after being strongly tilted. This allows the refrigeration circuit to stabilize and the refrigerant to redistribute evenly, preventing defects or malfunctions. After short movement or tilting of less than 45 degrees, please wait 2 hours before connecting the appliance.

Before connecting the appliance, make sure that the voltage and frequency of the power supply match the information on the rating plate! Using a different voltage may cause the appliance to overheat.

Connect the appliance only to a grounded socket with protective contact and a 230-volt connection.

Once the appliance is connected, wait about one hour to allow the interior to cool down sufficiently before loading it with goods. After a power failure or if the appliance has been disconnected from the mains, wait at least 5 minutes before reconnecting and restarting the appliance!

If the appliance is restarted immediately after being switched off, the fuse may trip and interrupt the power supply. In addition, the compressor may become overloaded and damaged.

STRUCTURE AND COMPONENTS



INITIAL START-UP

Before first use:
Unpack the appliance, check it for completeness, and set it up (see *Installation*). Clean the appliance (see *Cleaning*).
Connect the cleaned refrigeration unit (see *Electrical connection*) to a 230 V socket.
Only once the desired temperature has been reached (place your hand on the air intake to ensure it is sufficiently cold), load the appliance with your goods.

OPERATION – SETTINGS



1. Switching on

- Plug in the power cord.
- Set the power switch to [I].
- The appliance will display the current temperature.

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2. Unlocking / Locking the control panel

- **Press the ▲ and ▼ keys simultaneously for 3 seconds.**
- The display shows:
  - PON (unlocked)
  - POF (locked)

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3. Setting the operating temperature

1. Press the SET key → the display starts flashing.
2. Use ▲ or ▼ to set the desired temperature.
3. Press the SET key again to save.

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4. Manual defrosting

- Press and hold the AUX key for 2 seconds.
- The defrost indicator light illuminates → defrost cycle active.

CLEANING

Wipe the exterior and interior surfaces with a damp, soft cloth.
A mild dishwashing detergent may be used.
Wipe again with clean water (without detergent), then dry thoroughly.
The glass shelves can be removed for easier cleaning; clean them in the same way.
Do not use harsh, bleaching, caustic, or abrasive cleaning agents/tools, as these may damage or scratch the surfaces.
For the glass surfaces, a standard glass cleaner and a soft cloth may also be used. However, ensure that only the glass is moistened and that no large amounts of liquid run into the cabinet.

MAINTENANCE

The refrigeration unit requires very little maintenance. Approximately every 2 months, check the ventilation slots for dirt. Brush them off with a soft brush while simultaneously removing the dirt with a vacuum cleaner.

TAKING COOLING CABINET OUT OF OPERATION / STORAGE / TRANSPORT

Remove all food, switch off the appliance, and unplug it.
Clean the appliance thoroughly inside and outside, then leave the door open to allow sufficient drying.
If the appliance is dry and will not be used for an extended period, store it in a dry, dust-free, and cool place. Ideally, cover the appliance or use the original packaging to protect it from damage.
Ensure the appliance is secured against children or pets climbing inside, as this could result in entrapment.
If only the packaging materials are stored, please note that components such as plastic bags, cardboard, and styrofoam parts can be dangerous for children if they play with them unsupervised (e.g., risk of suffocation).
For transportation, use the original packaging to optimally protect the appliance against shocks, sharp edges, weather conditions, etc. Do not tilt the appliance more than 45 degrees, do not expose it to moisture or rain, and avoid heavy impacts.
After transportation, the appliance must stand still for approx. 24 hours before being reconnected. Otherwise, malfunctions may occur, as the refrigerant and oil need time to redistribute and settle correctly.

TROUBLESHOOTING

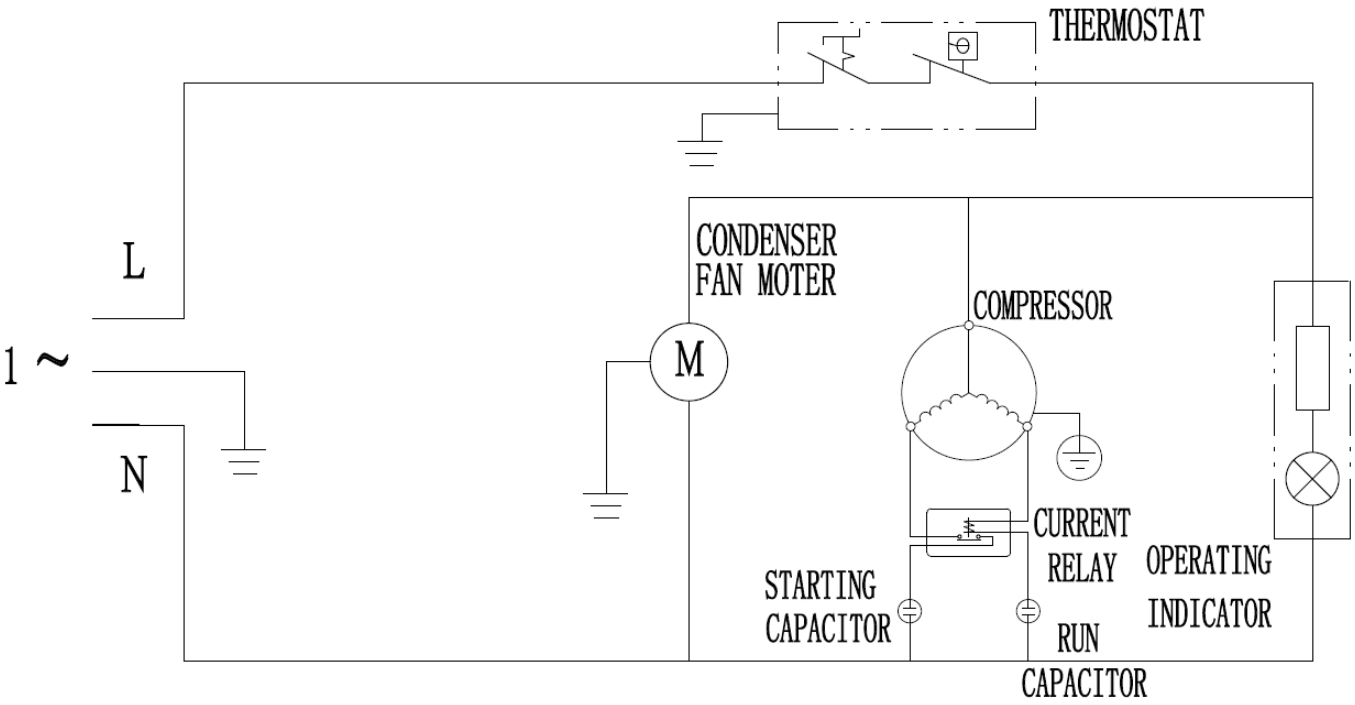
Problem	Cause and Solution
The unit does not work	- Is the plug inserted into the socket? - Does the socket supply power? - Is the fuse on the distribution board intact? - Has an existing residual current device (RCD) tripped? - Is there a power outage in the supply network?
The unit does not freeze	- Is the unit placed in an very warm environment, or is air circulation blocked? Move unit to ensure proper ventilation
If the problem cannot be solved by these simple troubleshooting steps, please contact your dealer.	

The following are not malfunctions:

The sound of running water may be heard when the refrigeration unit is operating. This is normal, as the refrigerant is circulating within the system.

During damp weather, condensation may form on the outside of the appliance. This is not a malfunction; the cause is high humidity. Simply wipe off the condensation with a cloth

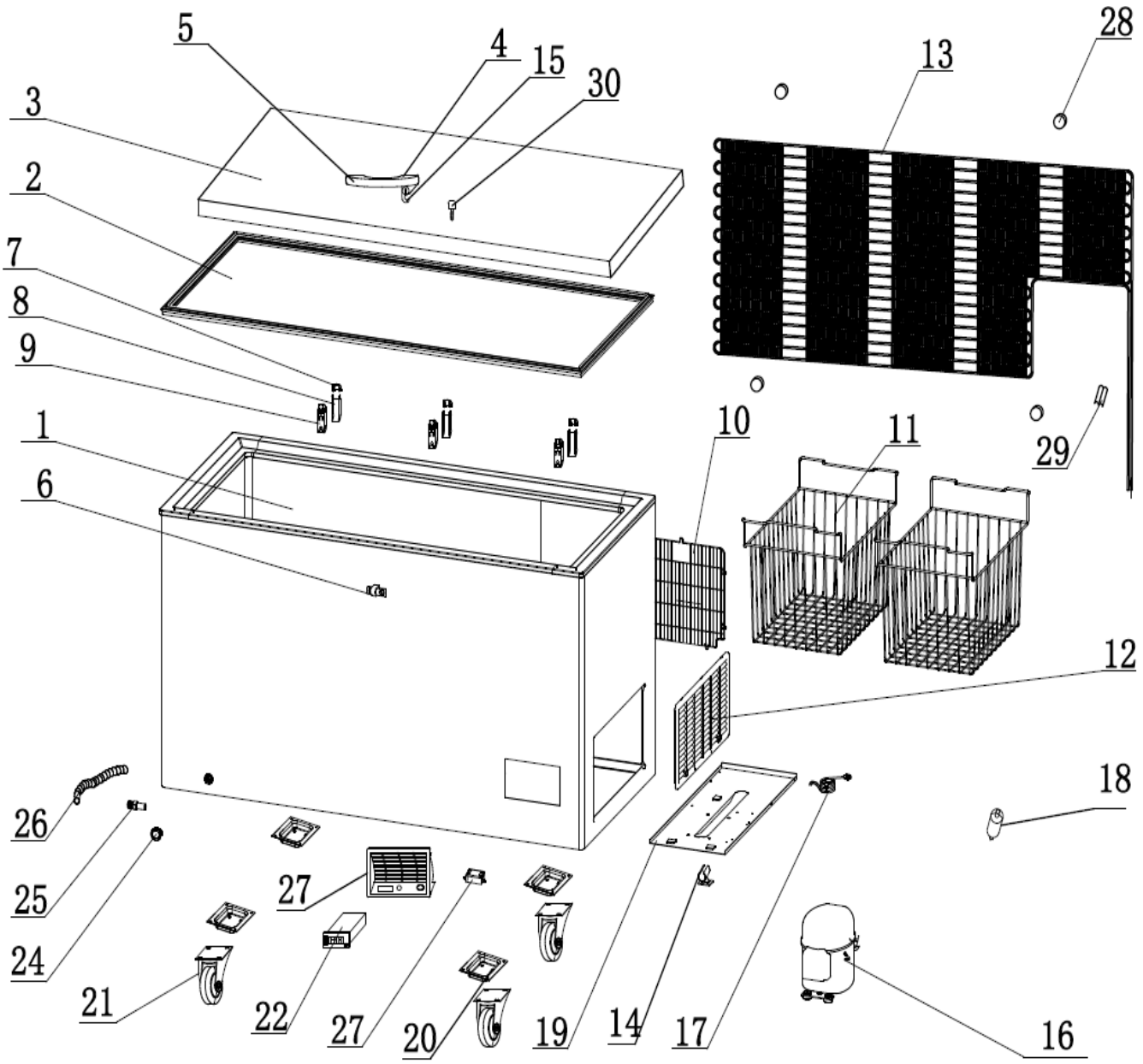
WIRING DIAGRAM



Übersetzung zum Schaltplan:

Englischer Begriff	**Deutscher Begriff**
Thermostat	Thermostat
Condenser Fan Motor	Kondensatorlüftermotor
Compressor	Kompressor
Current Relay	Anlaufrelais
Starting Capacitor	Anlaufkondensator
Run Capacitor	Betriebskondensator
Operating Indicator	Betriebsanzeige (Lampe)
L (Line)	Phase (L)
N (Neutral)	Neutralleiter (N)
Ground	Erdung

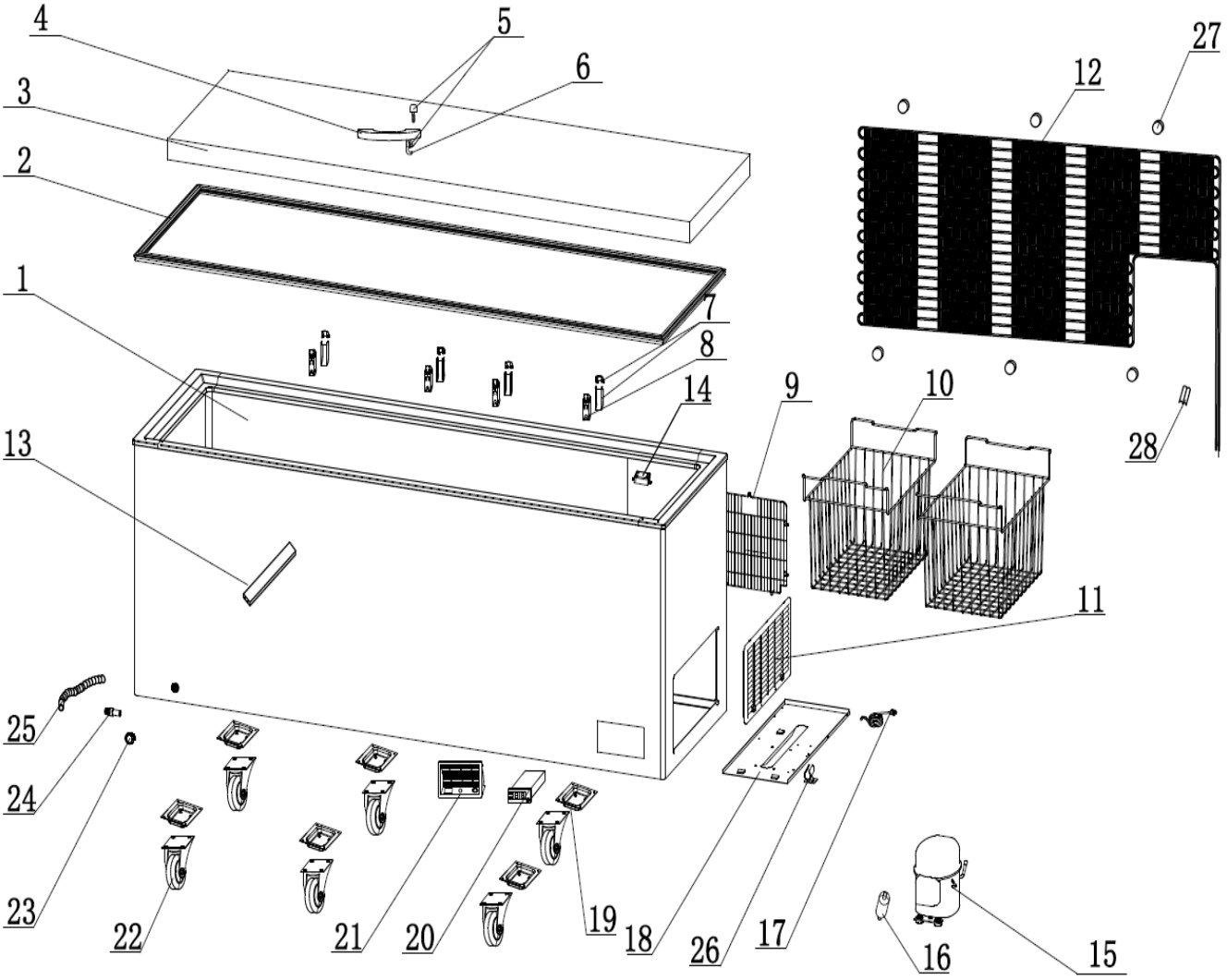
EXPLODED VIEW: 323-4600 BD 401 S



EXPLODED VIEW – LEGEND: 323-4600 BD 401 S

1	Body	Gehäuse / Korpus
2	Door seal	Deckeldichtung
3	Door	Deckel
4	Lock	Schloss
30	Key	Schlüssel
5	Handle	Griff
6	Lock clip	Schlossclip / Schlossfeder
7	Up cover of door hinge	Obere Abdeckung Türscharnier
8	Down cover of door hinge	Untere Abdeckung Türscharnier
9	Door hinge	Türscharnier
10	Unit room grill	Maschinenraumgitter
11	Basket	Korb
12	Air flow grill	Lüftungsgitter
13	Condenser	Kondensator
14	Filter drier support	Filtertrocknerhalterung
15	Lock hook	Schlossriegel / Schlosshaken
16	Compressor	Kompressor
17	EU plug	Zuleitung
18	Filter drier	Filtertrockner
19	Unit board	Montageplatte
20	Wheel fixed board	Radbefestigungsplatte
21	Standard castors	Rad ungebremst
21	Braked castors	Rad gebremst
22	Thermostat	Thermostat
23	Control panel	Bedienfeld / Steuerblende
24	Drain pipe cover	Abdeckung Abflussrohr
25	Drainage tube	Ablaufrohr
26	Drainpipe	Abflussrohr
27	Sensor fixed box	Sensorhalterung
28	Cushion	Kondensatorpolster

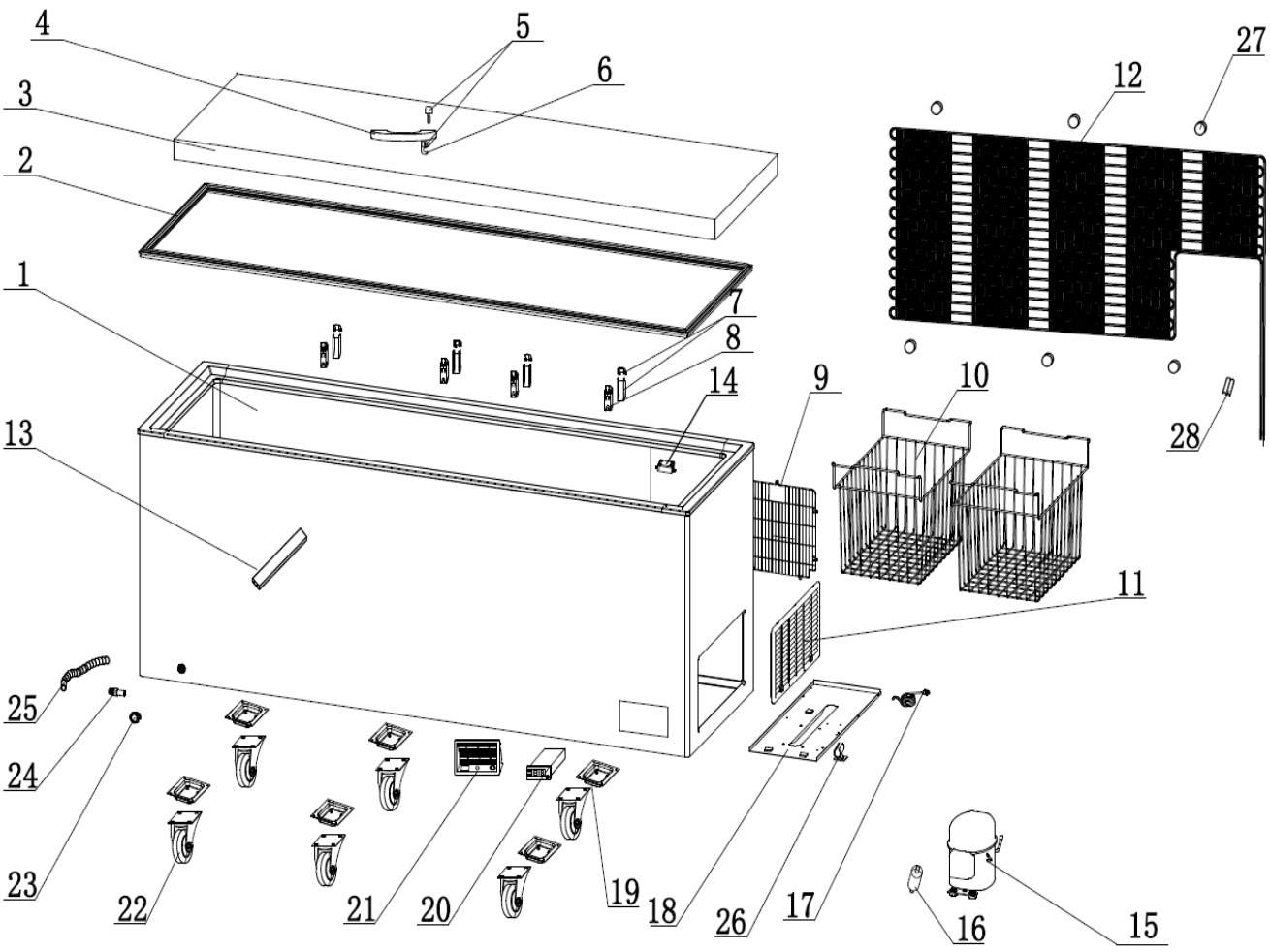
EXPLODED VIEW: 323-4605 BD 501 S



EXPLODED VIEW – LEGEND: 323-4605 BD 501 S

1	Body	Gehäuse / Korpus
2	Door seal	Deckeldichtung
3	Door	Deckel
4	Handle	Griff
5	Lock	Schloss
5	Key	Schlüssel
6	Lock hook	Schlossriegel / Schlosshaken
7	Up cover of door hinge	Obere Abdeckung Türscharnier
	Down cover of door hinge	Untere Abdeckung Türscharnier
8	Door hinge	Türscharnier
9	Unit room grille	Maschinenraumgitter
10	Basket	Korb
11	Air flow grille	Lüftungsgitter
12	Condenser	Kondensator / Verflüssiger
13	Middle bridge	Mittelsteg
14	Sensor fixed box	Sensorhalterung
15	Compressor (R290)	Kompressor (R290)
16	Filter drier	Filtertrockner
17	Plug	Zuleitung
18	Unit board	Montageplatte
19	Wheel fixed board	Radbefestigungsplatte
20	Thermostat	Thermostat
21	Control panel	Bedienfeld / Steuerblende
22	Standard castors	Rad ungebremst
22	Braked castors	Rad gebremst
23	Drain pipe cover	Abdeckung Abflussrohr
24	Drainage tube	Ablaufrohr
25	Drain pipe	Abflussrohr
26	Filter drier support	Filtertrocknerhalterung
27	Cushion	Kondensatorpolster

EXPLODED VIEW: 323-4610 BD 601 S



EXPLODED VIEW – LEGEND: 323-4610 BD 601 S

1	Body	Gehäuse
2	Door Seal	Deckeldichtung
3	Door	Deckel
4	Handle	Griff
5	Lock	Schloss
5	Key	Schlüssel
6	Lock Hook	Schlossbügel
7	Up Cover of Door Hinge	Oberer Abdeckung Türscharnier
	Down Cover of Door Hinge	Unterer Abdeckung Türscharnier
8	Door Hinge	Türscharniere
9	Unite Room Grille	Lüftungsgitter des Gefrierraums
10	Basket	Korb
11	Air Flow Grille	Lüftungsgitter
12	Condenser	Kondensator
13	Middle Bridge	Mittlere Verbindung
14	Sensor Fixed Box	Sensorbefestigungsbox
15	Compressor (R290)	Kompressor (R290)
16	Filter Drier	Filtertrockner
17	Plug	Zuleitung
18	Unite Board	Montageplatte
19	Wheel Fixed Board	Radbefestigungsplatte
20	Thermostat	Thermostat
21	Control Panel	Bedienfeld
22	Standard Castors	Rad ungebremst
22	Braked Castors	Rad gebremst
23	Drain Pipe Cover	Abflussrohrabdeckung
24	Drainage Tube	Ablaufrohr
25	Drain Pipe	Abflussrohr
26	Filter Drier Support	Filtertrocknerhalter
27	Cushion	Kondensatorpolster

PACKAGING DISPOSAL



Please separate the packaging materials accordingly and take them to the appropriate collection points for recycling and environmental protection.

DEVICE DISPOSAL



Once the appliance has reached the end of its life, please dispose of it properly at a designated collection point for electrical devices.
Electrical appliances do not belong in household waste.
Your local authority can provide information on the locations and opening hours of disposal sites.
This is the only way to ensure that old appliances are disposed of and recycled correctly.
Thank you!

Made in P.R.C for:
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Note: Technical, design, and model changes as well as errors are subject to change without notice.