

Operating Manual

Refrigerated Counter Model KYLJA 4100 TN, 4110 TN, 4130 TN, 4140 TN, 4150 TN, 4160 TN

Item-No.: 323-1072, 323-10721, 323-10722, 323-10724, 323-10725, 323-10726

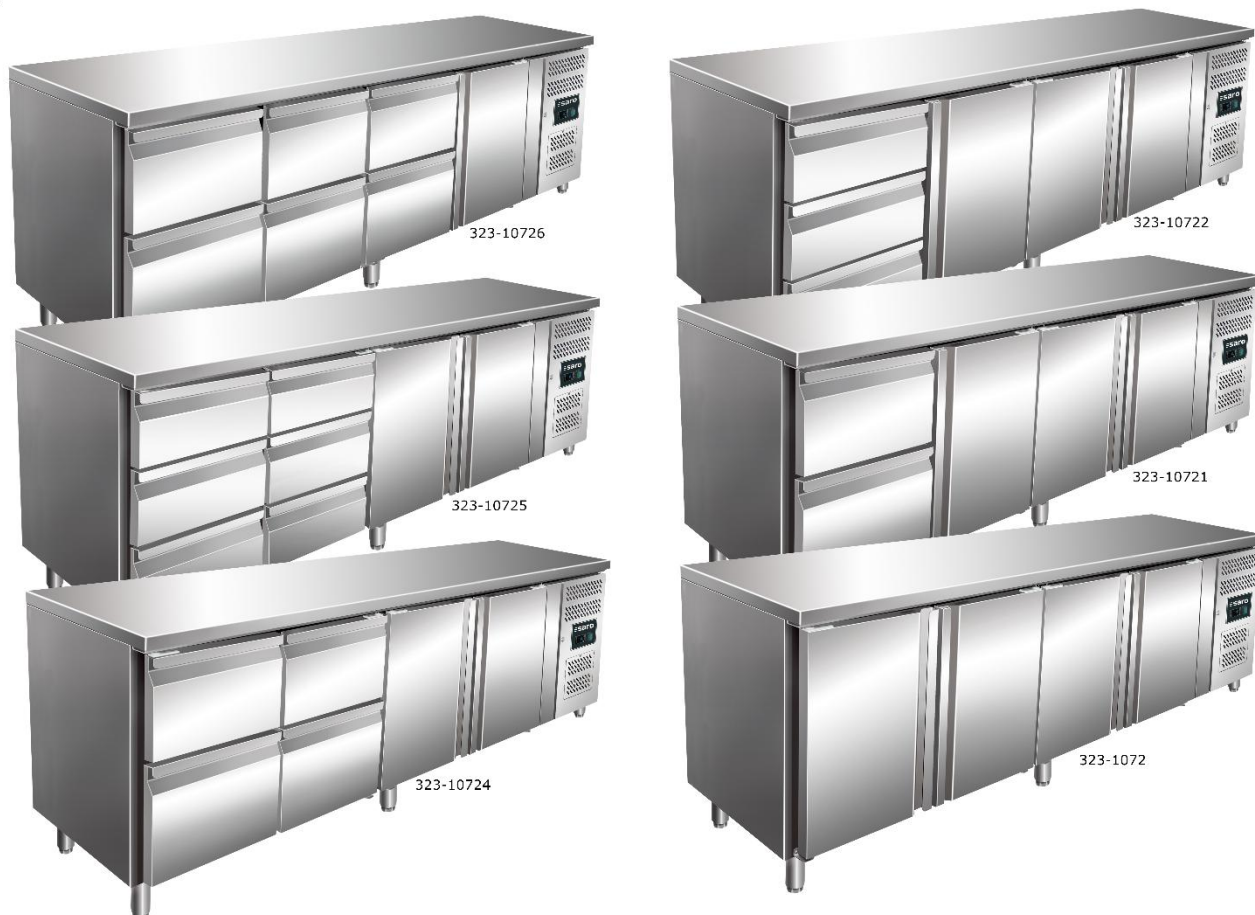


TABLE OF CONTENTS

SCOPE OF DELIVERY	3
STANDARDS AND DIRECTIVES	3
TECHNICAL OVERVIEW	4
SYMBOL EXPLANATIONS	6
GENERAL INSTRUCTIONS	7
SAFETY INSTRUCTIONS.....	8
DEVICE INSTALLATION.....	9
ELECTRICAL CONNECTION.....	9
STRUCTURE AND COMPONENTS	10
INITIAL START-UP.....	10
OPERATION – SETTINGS	11
CLEANING.....	12
MAINTENANCE	12
TAKING COOLING CABINET OUT OF OPERATION / STORAGE / TRANSPORT.....	12
TROUBLESHOOTING	13
WIRING DIAGRAM.....	14
WIRING DIAGRAM.....	15
EXPLODED VIEW: Door + 2 Drawer	16
EXPLODED VIEW – LEGEND Door + 2 Drawer.....	17
PACKAGING DISPOSAL	19
DEVICE DISPOSAL	19

Dear Customer,

Congratulations on your new SARO refrigerated worktable.

The product you have purchased has been designed for professional use in restaurants, hotels, cafés, canteens, and supermarkets. It serves to reliably cool and keep food and beverages fresh. The refrigerated worktable is particularly suitable as both a working and storage surface in professional kitchens, as it allows the preparation of dishes with direct access to chilled ingredients.

Please read this instruction manual carefully before operating the unit.

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

SCOPE OF DELIVERY

- 1 Refrigerated Counter
- Grid
 - (4 Grids = KYLJA 4100 TN
 - 3 Grids = KYLJA 4110 & 4130 TN
 - 2 Grids = KYLJA 4140 & 4150 TN
 - 1 Grid = KYLJA 4160 TN)
- 1 Operating manual

STANDARDS AND DIRECTIVES

The device complies with the current EU standards and directives:

Machinery Directive – MRL 2006/42/EC,
Directive on Electromagnetic Compatibility – 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

Refrigerated Counter						
Model	KYLJA 4100 TN	KYLJA 4110 TN	KYLJA 4130 TN	KYLJA 4140 TN	KYLJA 4150 TN	KYLJA 4160 TN
Order No.	323-1072	323-10721	323-10722	323-10724	323-10725	323-10726
Material	Housing, inner chamber: Stainless steel Worktop: Stainless steel					
Door(s)/Drawer(s)	4 doors, self-closing	3 doors, 1 set of 2, self.closing	3 doors, 1 set of 3 drawers, self-closing	2 doors, 2 sets of 2 drawers, self-closing	2 doors, 2 sets of 3 drawers, self-closing	1 door, 3 sets of 2 drawers, self-closing
Lock	none					
Shelves	4, height-adjustable 4 guide rail sets	3, height-adjustable 3 guide rail sets		2 height-adjustable 2 guide rail sets		1 height-adjustable 1 guide rail set
On/Off switch	Yes					
Connection setup	Ready to plug in with Schuko plug					
Temperature control	Digital temperature control (DIXELL)					
Insulation	60 mm					
Cooling type	Forced-air cooling					
Defrosting	Automatic					
Feet	6, height-adjustable					
Temerpature range	-2 / +8 °C					
Shelf size	W 335 x D 530 mm					
Gross capacity	616 litres					
Climate class	Suitable for climate class 5, high-performance unit	Suitable for climate class 4, standard unit				
Refrigerant type/quantity	R600a (GWP 3) / 0,095kg 	R600a (GWP 3) / 0,095kg 	R600a (GWP 3) / 0,095kg 	R600a (GWP 3) / 0,095kg 	R600a (GWP 3) / 0,095kg 	R600a (GWP 3) / 0,095kg 
Connection	230 V / 50 Hz / 0,30 kW	230 V / 50 Hz / 0,30 kW	230 V / 50 Hz / 0,30 kW	230 V / 50 Hz / 0,30 kW	230 V / 50 Hz / 0,30 kW	230 V / 50 Hz / 0,30 kW
External dimensions	W 2230 X D 700 x H 890-950 mm	W 2230 X D 700 x H 890-950 mm	W 2230 X D 700 x H 890-950 mm	W 2230 X D 700 x H 890-950 mm	W 2230 X D 700 x H 890-950 mm	W 2230 X D 700 x H 890-950 mm
Regulation for energy labeling	VO (EU) 2015/1094 – Commercial refrigerated cabinets Group: Table refrigeration counters					
Energy efficiency class/ EEI	C (Spectrum A+++ bis G) / 38,50 % 	C (Spectrum A+++ bis E) / 40,30 % 	C (Spectrum A+++ bis E) / 40,60 % 	C (Spectrum A+++ bis E) / 45,80 % 	C (Spectrum A+++ bis E) / 46,40 % 	C (Spectrum A+++ bis E) / 47,70 % 

Energy consumption per year/day	1077 kWh / 2,95 kWh	1077 kWh / 2,95 kWh	1077 kWh / 2,95 kWh	1153 kWh / 3,16 kWh	1153 kWh / 3,16 kWh	1153 kWh / 3,16 kWh
Net/Gross weight	172 / 193 kg	170 / 193 kg	172 / 193 kg	188 / 193 kg	188 / 193 kg	183 / 203 kg
GTIN [EAN-Code]	40173373231 97	40173373245 45	40173373245 52	40173373245 69	40173373245 76	40173370674 80

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.



WARNUNG: GEFAHR DURCH ELEKTRISCHEN STROM!

Dieses Symbol macht auf gefährliche Situationen durch elektrischen Strom aufmerksam. Bei Nichtbeachten der Sicherheitshinweise besteht Verletzungs- oder Lebensgefahr!



WARNUNG: HEISSE OBERFLÄCHE - VERBRENNUNGSGEFAHR

Dieses Symbol weist auf die heiße Oberfläche des Gerätes, während des Betriebes und danach hin. Verbrennungsgefahr bei Nichtbeachten!



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!!

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

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!

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!

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.

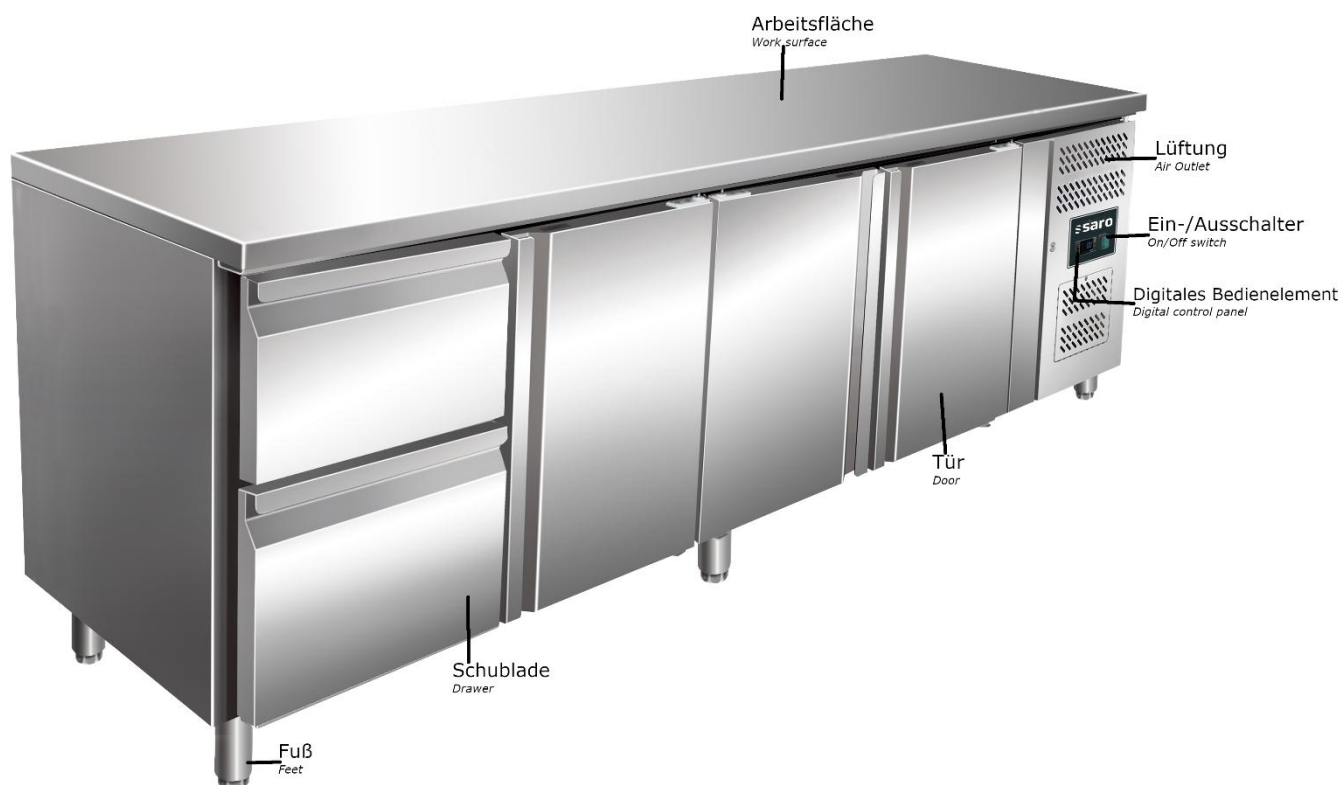
Before connecting the appliance, make sure that the voltage and frequency of the power supply match the information on the rating plate! Using a different voltage may cause the appliance to overheat.

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.

2. Unlocking / Locking the control panel

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

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.

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

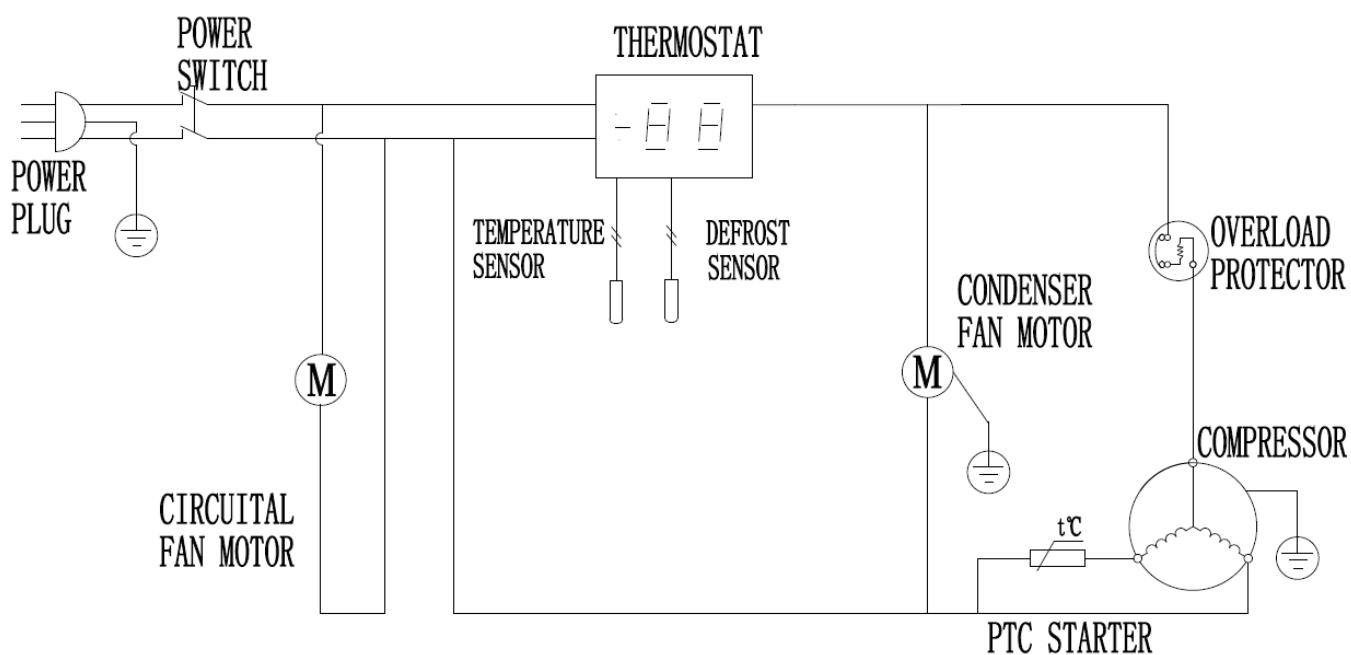
Problem	Cause and Solution
The appliance does not work	- The appliance is not switched on → Check whether the plug is properly inserted and the unit is switched on - Plug and/or cable are damaged -> Contact your dealer or a qualified technician - The fuse in the plug is blown → Replace the fuse Internal wiring fault → Contact your dealer or a qualified technician
The appliance switches on, but the temperature is too high/low	- Too much ice on the evaporator → Defrost the appliance - Condenser clogged with dust → Clean the condenser - Doors not properly closed → Check that the doors are closed and the door gaskets are intact - Door gaskets damaged → Replace door gaskets - Ambient temperature too high → Improve ventilation or move the appliance to a cooler location - Unsuitable food stored in the appliance → Remove unsuitable items and clear any blockages on the fan The appliance is overloaded -> Reduce the amount of food stored in the appliance
Water is leaking from the appliance	- The appliance is not properly levelled → Adjust the screw feet so the appliance is level (Check for proper drainage) - The drain outlet is blocked → Clean the drain outlet - Water flow to the drain is obstructed → Level the appliance properly (check drainage) - The water container is damaged → Contact your dealer or technician The drip tray is overflowing → Empty the drip tray (check drainage)
The appliance is unusually noisy	- Protective cover not removed → Remove the protective cover - Loose nuts/screws → Tighten all nuts and screws if necessary The appliance is not installed on an even, stable surface → Place the appliance on a flat, stable surface
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

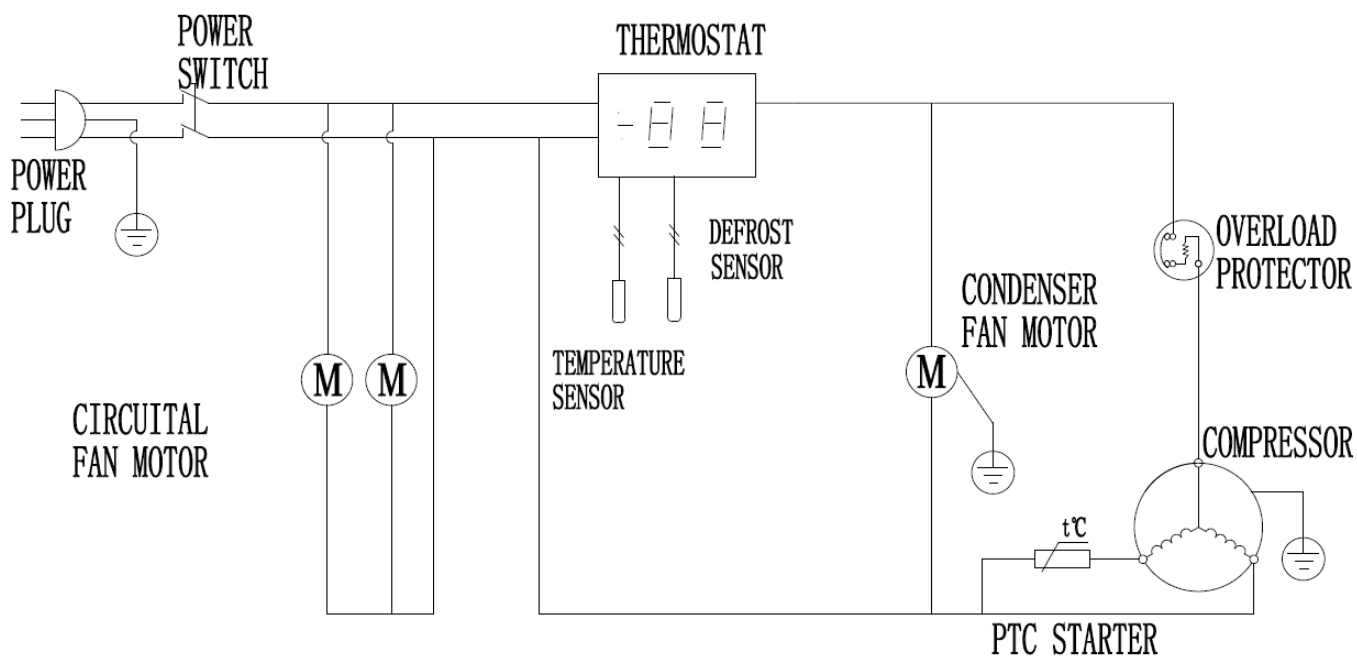
WIRING DIAGRAM



Übersetzung zum Schaltplan:

Englischer Begriff	Deutsche Übersetzung
Power Plug	Netzstecker
Power Switch	Hauptschalter
Circuitual Fan Motor	Umluftventilatormotor
Thermostat	Thermostat
Temperature Sensor	Temperatursensor
Defrost Sensor	Abtausensor
Condenser Fan Motor	Kondensatorlüftermotor
Compressor	Kompressor
Overload Protector	Überlastschutz
PTC Starter	PTC-Anlaufrelais
t°C	Temperatur (°C)

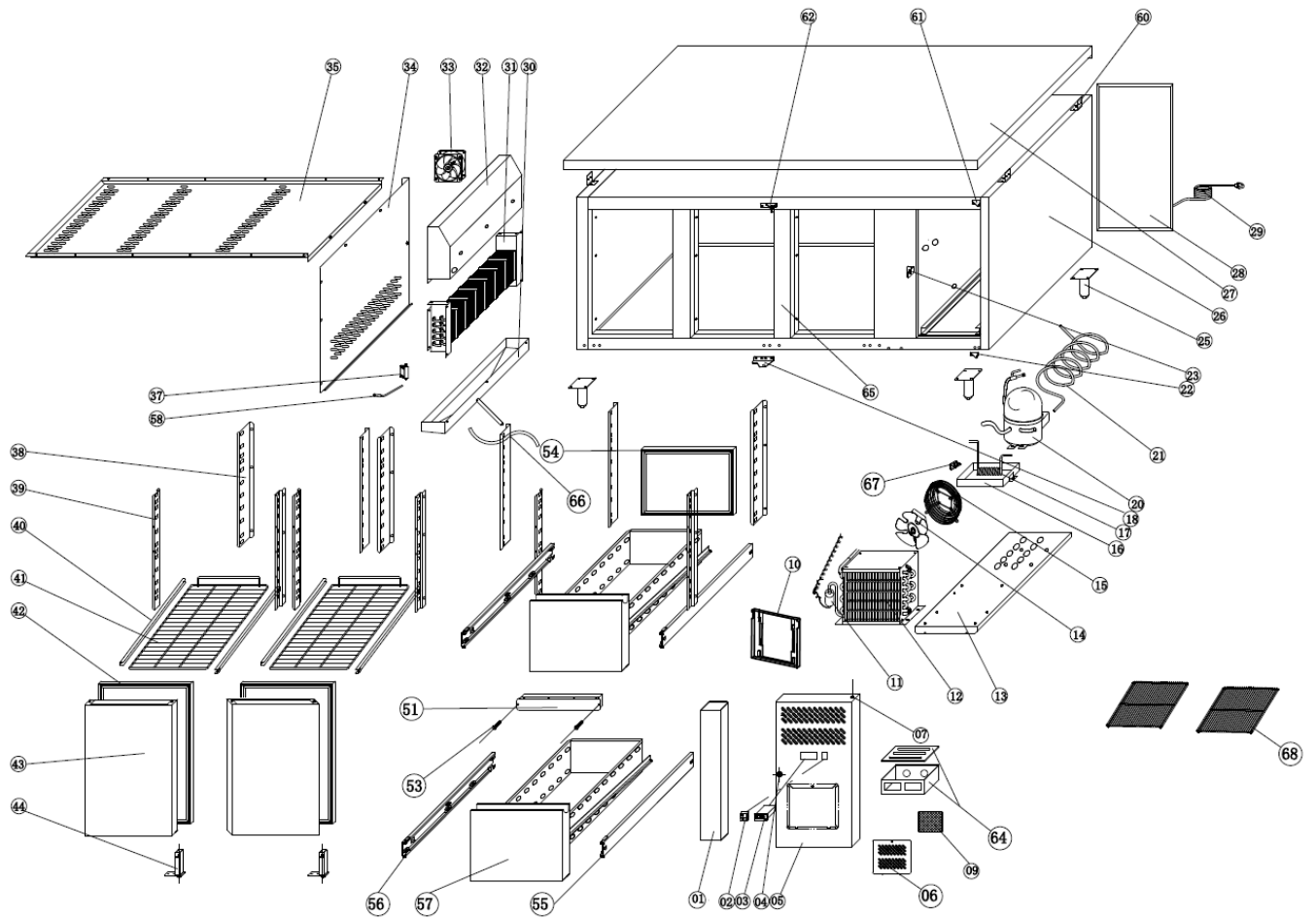
WIRING DIAGRAM



Übersetzung zum Schaltplan:

Englischer Begriff	Deutsche Übersetzung
Power Plug	Netzstecker
Power Switch	Hauptschalter
Circuitual Fan Motor	Umluftventilatormotor
Thermostat	Thermostat
Temperature Sensor	Temperatursensor
Defrost Sensor	Abtausensor
Condenser Fan Motor	Kondensatorlüftermotor
Compressor	Kompressor
Overload Protector	Überlastschutz
PTC Starter	PTC-Anlaufrelais
t°C	Temperatur (°C)

EXPLODED VIEW: Door + 2 Drawer



EXPLODED VIEW – LEGEND Door + 2 Drawer

1	Fixed front panel	Feste Frontblende
2	Main switch	Hauptschalter
3	Thermostat	Thermostat
4	Lock	Schloss
5	Front panel	Bedienblende
6	Air flow window	Lüftungsklappe
7	Bushing	Buchse
9	Filter	Luftfilter
10	Condenser fan support	Halterung Kondensatorlüfter
11	Filter drier	Filtertrockner
12	Condenser	Kondensator
13	Unit board	Montageplatte
14	Condenser fan	Kondensatorlüfter
15	Basket guard grills	Lüfterschutzgitter
16	Water box	Verdunsterschale
17	Evaporate pipe	Heißgasrohr
18	Door hinge / right	Türscharnier links / rechts
20	Compressor	Kompressor
21	Suction pipe	Saugrohr
22	Front panel hinge	Scharnier Bedienblende
23	Lock hook	Verriegelungshaken
25	Feet	Füße
26	Body	Gehäuse
27	Top	Oberseite / Arbeitsplatte
28	Unit room cover	Rückwand Geräteraum
29	Plug	Zuleitung
30	Evaporator water pan	Verdampfer-Wasserwanne
31	Evaporator	Verdampfer
32	Fan support	Lüfterhalterung
33	Circuit fan	Verdampferlüfter
34	Evaporator cover	Verdampferabdeckung
35	Air flow conduct board	Luftführungsplatte
37	Sensor fixed box	Sensorgehäuse
38	Back support left	Hinterer Träger links
38R	Back support right	Hinterer Träger rechts
39	Front support left	Vorderer Träger links
39R	Front support right	Vorderer Träger rechts
40	Guide left	Laufleiste links
40R	Guide right	Laufleiste rechts
41	Shelf	Rost
42	Gasket	Türichtung
43	Door	Tür links / rechts
44	Door spring hinge	Türfederscharnier
51	Bridge	Zwischensteg
53	Screw	Schraube
54	Gasket	Schubladendichtung

55	Guide (right)	Teleskopzug (rechts)
56	Guide (left)	Teleskopzug (links)
57	Drawer	Schublade
58	Sensor	Sensor
60	Top fixed board	Befestigungswinkel für Arbeitsplatte
61	Front panel up hinge	Oberes Scharnier Bedienblende
62	Door up hinge right	Oberes Türscharnier rechts links
64	Junction box	Schaltkasten
64a	Junction box cover	Abdeckung Schaltkasten
65	Middle bridge	Mittelstrebe
66	Drain pipe	Ablassrohr
67	Drain pipe fixer	Halterung Ablassrohr
68	Floor protector shelf	Bodenrost

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:

SARO Gastro-Products GmbH
Sandbahn 6, 46446 Emmerich am Rhein, Germany
Tel. +49 (0) 2822 9258-0
Fax +49 (0) 2822 18192
E-Mail info@saro.de
Web www.saro.de