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Product presentation

Features of products

■ **Energy saving**

Energy saving is realized by optimizing the refrigerating system and implementing intelligent control. All products of this series meet the national standard for energy-saving products.

■ **Low noise technology**

A series of technologies have been adopted to lower the noise level to the minimum.

■ **Wide climate-range design**

The product is designed for a wide range of climates, from the sub-temperate zone to the subtropical zone.

■ **R600a refrigerant, a pioneer in environmental protection**

Both the refrigerant R600a and the foaming agent are hydrocarbon and will neither damage the ozone layer nor produce a green house effect.

■ **Safe and durable glass**

Toughened glass shelves are safe, beautiful and durable and with a heavy load capacity.

■ **Removable door seal for convenient cleaning**

The removable door seals are durable with a strong adhesive force and can be cleaned easily.

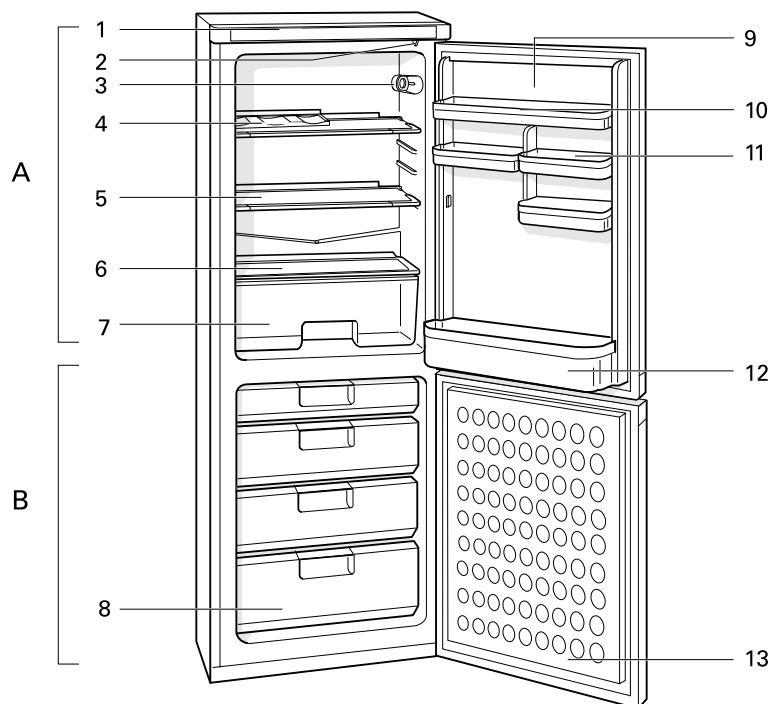
■ **Left-right door opening alternatives**

The door can open on the left or on the right for more convenient placement of your refrigerator.

Product presentation

Names of components

This manual covers a number of refrigerator models. The following diagram may differ slightly from your model in some features and devices. Please follow the packing list attached.



A Cooler compartment

B Freezer compartment

- | | | | |
|---|-----------------------|----|-------------------|
| 1 | Control panel | 8 | Freezer drawer |
| 2 | Cooler door switch | 9 | Cooler door |
| 3 | Thermostat | 10 | Freezer drawer |
| 4 | "Vario" shelf | 11 | Short bottle tray |
| 5 | Glass shelf | 12 | Big bottle tray |
| 6 | Glass partition tray | 13 | Freezer door |
| 7 | Vegetable compartment | | |

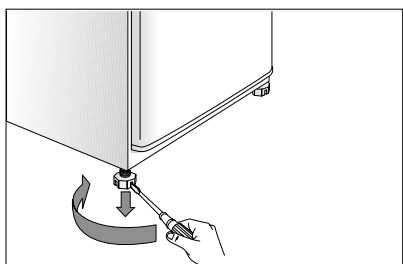
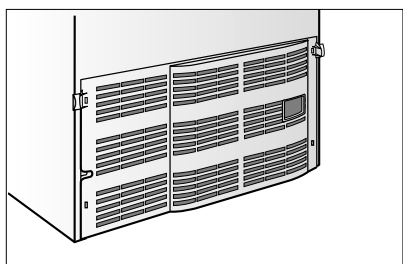
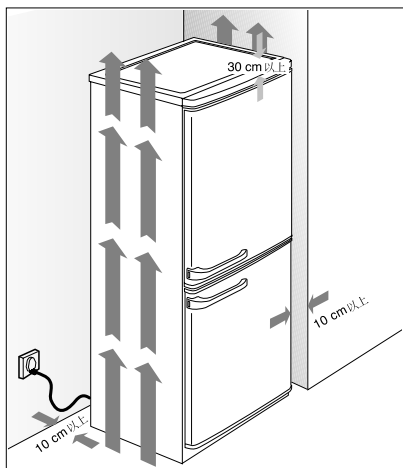
Product presentation

Safety precautions

- A separate three-pin power supply socket with grounding wire must be used.
- The power cord must not be squeezed, folded, knotted or damaged. If the power cord has been damaged during handling or installation, immediately contact the nearby customer service to replace the cord. There is the risk of possible electrical shock or fire if a damaged cord is plugged into a power source.
- The power supply plug must be removed from the socket during refrigerator maintenance or cleaning.
- To avoid breaking the cord, never pull the cord when removing the plug from the wall.
- It is forbidden to put inflammable or explosive materials, such as alcohol or gasoline in the refrigerator.
- Never put a glass bottle or can containing liquid in the freezer compartment, they may expand and crack or break.
- Do not touch frozen food or metal container in the freezer compartment with wet hands, as the fingers may freeze to the frozen item and cause injuries.
- The refrigerating piping must not be damaged. The refrigerant in the piping can cause serious injury if splashed into the eyes. In case of emergency, immediately wash the eye and go to a hospital for treatment.
- Do not place electrical appliances such as a microwave oven, electrical cooker or stabilizer on the top of the refrigerator.

Product presentation

Handling and placement



■ Handling

- The refrigerator should not be moved by holding it by the door or door handle. It should be lifted from the bottom.
- The refrigerator should not be laid down or turned upside down.

■ Placing

- The refrigerator should be placed in a dry and well ventilated room, with a side and back clearance of 10cm or over, and a 30cm clearance on top.

- The ventilation grid on the compressor cover at the back of the refrigerator must not be covered or blocked. Avoid placing the refrigerator close to a heat source or subjecting it to direct sunlight.

■ Foot adjustment

- When the refrigerator is in place, the two front plastic foot screws can be adjusted to a proper height.
- Place the refrigerator in a stable and level position. Adjust the two foot screws with a flat screwdriver, or spanner on the side in the direction shown by the arrow, so that the refrigerator can be kept in an upright and stable condition. To avoid vibration and noise, be sure the plastic foot screws are securely on the ground.

■ Left-right door opening alternatives

Due to room layout or other reason, please contact our local customer service department, for door opening direction change.

Product presentation

Electric connections

- The rated voltage of the refrigerator is 220VAC, the rated frequency 50Hz, and the permissible voltage fluctuation range is 180~242V.
- To ensure safe operation, the socket and its connection wires must be able to withstand a current over 10A.

Product standards

This series of refrigerators are based on the following national standards:

- **GB/T8059.2-1995**
Household refrigerating appliances - Refrigerator-freezer
- **GB4706.1-92**
Safety of household and similar electrical appliances - Part 1: General requirements
- **GB4706.13-1998**
Safety of household and similar electrical appliances - Particular requirements for refrigerators, food-freezers and ice-makers
- **GB12021.2-1999**
The limited value and energy-saving evaluation value of power consumption for household refrigerators.

Operation

Preparation before operation

- Remove all packaging materials, including the bottom foam pad underneath the refrigerator, and pads and tapes inside the refrigerator securing accessories.
- Check and count all accessories and documents against the packing list.
- Place the refrigerator at a proper location and follow the instructions in "Handling and Placement"
- Clean the refrigerator compartment, bio-fresh compartment and freezer compartment, as well as the outside of the refrigerator, according to the instructions on Page 14.
- Let the refrigerator stand for over 30 minutes before switching on the power supply.

Thermostat

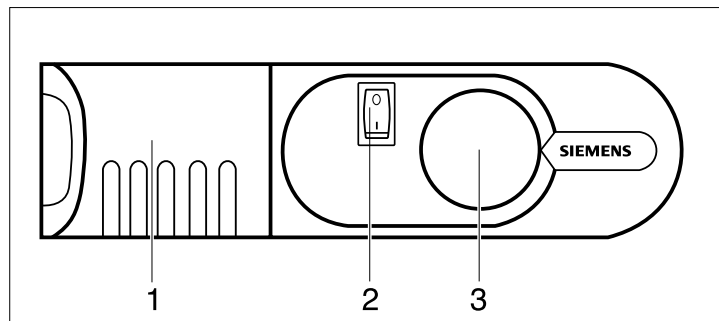
■ Lamp hood 1

■ Winter switch 2

- This switch should be set on by pressing the black mark "I" when the ambient temperature is low (room temperature $< 16^{\circ}\text{C}$) in winter or food about 3kg is to be frozen at one time.
- In other cases, this "winter switch" must be set off by pressing the black mark "O" to avoid increasing power consumption.

■ Thermostat knob 3

- It has 5 steps from "1" to "5," with "1" at the maximum temperature and "5" at the minimum temperature.
- The compressor will stop running when the thermostat knob is set at "0."



Operation

Switching-on and temperature adjustment

Switching-on

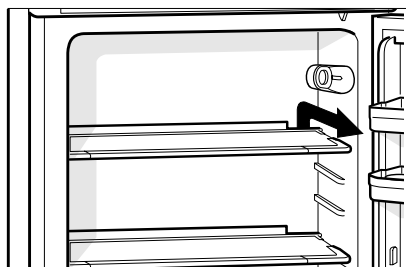
- When switched on for the first time, the thermostat knob should be set at "5." Let the refrigerator run for a period of time with the doors closed, then turn the thermostat knob to a normal step (Step 1~3).
- The temperature in the refrigerator decreases step by step from "1" to "5."

Temperature adjustment

- Normally the thermostat is set at Steps 1~3 and its internal temperature can meet the requirement. It can be set at Step 4 or 5 for super freezing or making ice-cubes.
- You can set the thermostat at different steps according to the ambient temperature in different seasons, for better preservation of food.
- When the compressor runs for an excessively long time, the thermostat knob can be set to a lower step, for example, from "4" to "3" or to "2."
- Please set the winter switch on when the ambient temperature is below 16°C in winter.

Operation

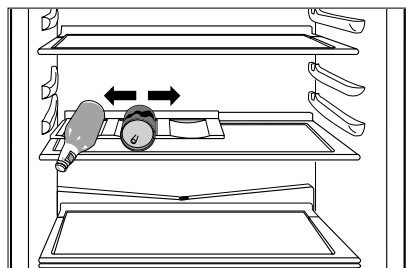
Cooler compartment



The cooler compartment is mainly used for short term storage of food.

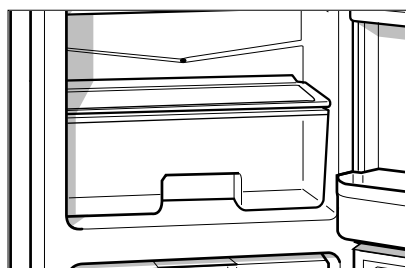
■ Glass shelf in cooler compartment

The position of this shelf is adjustable to facilitate storage of different types of food. It can be pulled out by lifting it at the back.



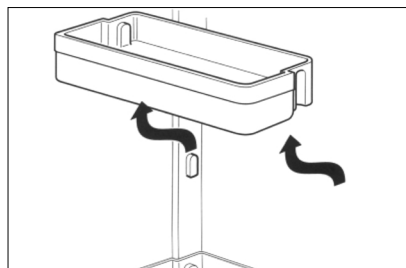
■ "Vario" shelf

It can be moved to the left or right as desired for placing or stacking bottles. It can be taken out and stored elsewhere if not used.



■ Vegetable box

It is used to store fruits and vegetables.

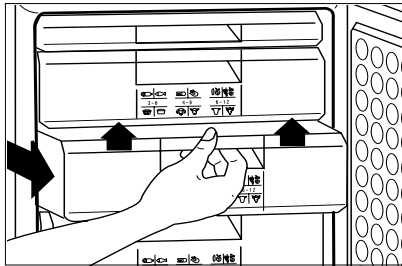


■ Bottle trays on door

The trays are used to store eggs, bottled beverages or other items. They can be rearranged by the user according to his need. A tray can be removed by lifting it up gently.

Operation

Freezer compartment



The freezer compartment is used for freezing food, storing frozen food and making ice cubes. It can store foods safely for long periods of time.

Accessories and placement of food

- The freezer compartment is provided with drawers. A drawer can be removed by pulling out and lifting it gently.
- The upper small drawer can freeze and store small sized food, such as dumplings and making ice cubes. The middle drawer can freeze and store larger sized food.
- The lower drawer is mainly for storing already frozen food.
- The drawers are accessories provided for the convenience of users, but the food can also be placed directly on the shelves after taking the drawers out.

Maximum freezing capacity and super freezing

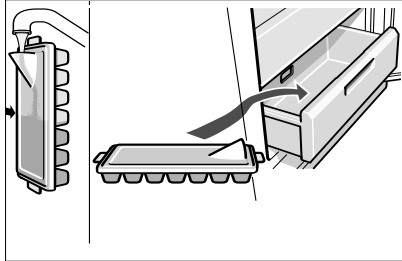
■ Maximum freezing capacity

The freezing capacity indicated in the Technical Specification refers to the amount of food that can be frozen at one time under standard conditions within 24 hours (kg/24h) after the Super freezing key is pressed.

■ Super freezing

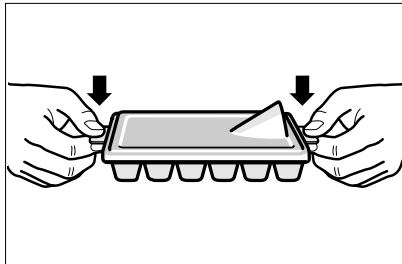
- When food about 3kg is to be frozen at one time, set thermostat knob to Step 4 or 5, and at the same time turn on the "winter switch" by pressing the black mark "I". Be sure to turn off the "winter switch" at the end of super freezing (about 24 hours) by pressing the black mark "O", to avoid increase of power consumption.
- Small amount of food can be frozen directly without changing the position of the "Super Freezing Switch".
- Do not put the fresh food that is to be frozen directly onto the frozen food.

Operation

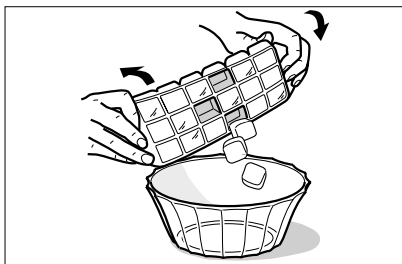


Making ice cubes

- Pour cool boiled water, or beverage, into the ice-maker until it reaches the marked water level line. Swing gently and put it into the freezer compartment in a horizontal position.

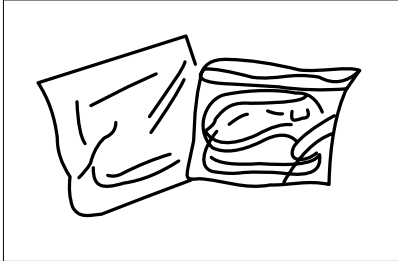


- To remove ice cubes, press the handles on both sides of the ice-maker tray, to remove the cover.



- Twist the tray slightly and the ice cubes will drop out.

Operation



Packing food to be frozen

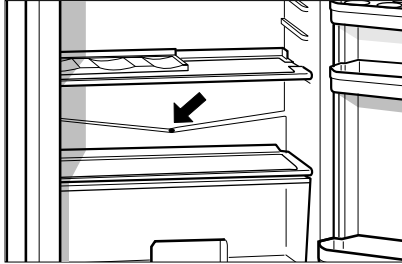
- Before freezing food, it is better to pack it up in order to prevent it from deterioration, changing or crossing of smell.
- Put food into a bag and squeeze it gently to expel the air in the bag as much as possible for good sealing.
- It is a good practice to attach a tag with freezing date indicated on each bag before freezing.

Thawing frozen food

- Put frozen food under room temperature or in the cooler compartment, or have it thawed on an electric oven or in a microwave oven.
- The following should be noted when you need to re-freeze food just thawed.
 - The food should not be left thawed for too long.
 - It is better to boil, fry, roast or thoroughly cook the food, and place it in a container before freezing.

Cleaning and maintenance

Defrosting



Refrigerator compartment and bio-preservation compartment

Defrosting is performed automatically for the refrigerator compartment, and dew water will go into the drain at the lower back of the refrigerator and flow into dew water tube also at the back of the refrigerator. The water is evaporated by the heat from the compressor.

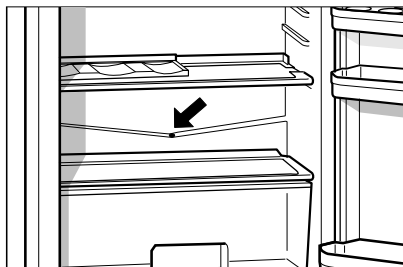
Freezer compartment

Large accumulations of frost or ice, on the evaporator adversely affects the efficiency of refrigeration and increases energy consumption. Therefore, defrosting should be performed when there is a thick frost layer on the evaporator. The freezer compartment should be defrosted at least once or twice a year as following:

- The power supply plug of the refrigerator must be unplugged before defrosting.
- Usually, the best time to defrost is when the refrigerator is completely empty, or nearly empty.
- If there is still frozen food in the freezer compartment, set the thermostat knob to "4" or "5" and wait for about 4 hours before defrosting. During this time, food will freeze harder and it can be placed safely under the room temperature for a period of time.
- During defrosting, the objects in the freezer compartment drawers should be taken out and placed in a cool place. Open the freezer compartment door and complete the defrosting as quickly as possible (The longer the food is at room temperature, the shorter its self-life storage).
- Make a thorough cleaning of the freezer compartment after defrosting.

Cleaning and maintenance

Cleaning



Precautions for cleaning the refrigerator

- The power supply plug must be unplugged before cleaning.
- Ensure that no water enters the light equipment during cleaning.
- Wash with a soft cloth, lukewarm water, and a mild detergent. Dry with a clean and soft cloth.
- The “drain trough and outlet hole” at the lower part of the refrigerator compartment and bio-fresh compartment should be cleaned frequently to ensure that thawing water can flow out.
- Cleaning agents containing abrasives (such as comet), acids or chemical solvents (such as alcohol), or polishing agents must not be used.

Key points for energy saving

- The refrigerator should be placed in a dry and well-ventilated location. It should not be close to a heat source or exposed to direct sunlight.
- Hot food should be allowed to cool to the room temperature before being put into the refrigerator.
- Ice accumulated in the freezer compartment should be removed, as thick ice layer will weaken the heat exchange and result in more energy consumption.
- Let frozen food thaw in the cooler compartment so that it can assist in cooling the cooler compartment.
- The cooler door should not be opened unnecessarily.

Cleaning and maintenance

Other precautions

■ During power failure

- Reduce the door opening frequency and avoid placing new food into the refrigerator (to prevent accelerated temperature rise inside).
- If the power outage is forecasted, the Super cooling switch can be turned on in advance (by pressing the Super Key) to further lower the internal temperature or more ice cubes can be made and placed at the upper part of the cooler compartment.

■ Shutting down the refrigerator

- When you need to shut down the refrigerator, you can unplug the power supply plug directly.
- If you decide to stop the refrigerator's operation for a period of time, proceed as follows: turn off the power, make defrosting and cleaning, and finally keep the doors slightly open to prevent unpleasant smell from being produced.
- The refrigerator should not be shut down under normal circumstances, as this may affect its service life.

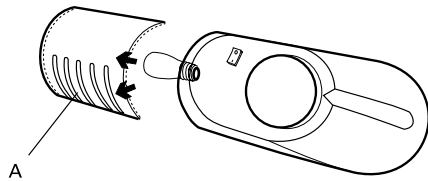
Common problems, simple causes and solutions

Common problems

- **Dew water on external surface of refrigerator**
This may occur when the humidity in the atmosphere is high. Just wipe it dry.
- **Frost on the back in the refrigerator compartment**
The refrigerating piping for the refrigerator compartment is close to the back of the refrigerator compartment container and the temperature here will fall below 0°C. As a result, frosting will form when it is in running. The frost will thaw when the refrigerating system for the refrigerator compartment stops operation.
- **Warming of the door frame peripheral of freezer compartment**
This is a special provision to prevent frosting or condensation around the freezer compartment door.
- **Warming of left and right side panels**
The condenser is close to the inside of the side panels. The refrigerator will dissipate heat via the condenser during operation. The side panel temperature can be about 50°C in summer when the ambient temperature is high.
- **Hot compressor**
The housing temperature of the compressor can be about 80°C when the refrigerator is in running.
- **Water flowing noise in the refrigerator**
This is the noise of the refrigerant flowing in the piping when the refrigerating system is in running.
- **Cracking noise in the refrigerator**
This is resulting from the expansion and contraction of the innerliner and refrigerating piping when the refrigerator is running.
- **The compressor will not start when the voltage is too low**
A power stabilizer of, or above, 500W should be provided.
- **Humming vibrating noise**
A slight humming noise can be heard when the refrigerator is running. If the refrigerator is not level, vibrations and other noise may occur. Follow the instructions on Page 5 to level the refrigerator.
- **Long time operation**
During the summer, when ambient temperatures is high, the compressor will start more frequently and run longer time than normal.
- **Power consumption is higher than the indicated value level**
The rated power consumption given in the Technical Specification is the value measured according to the national standard, i.e., the refrigerator is operating steadily for 24h in an ambient temperature of 25°C with the refrigerator compartment temperature controlled at 5°C and the freezer compartment temperature controlled at -18°C and the door kept closed. When a lot food is cooling, the ambient temperatures is high, or the door is opened frequently, it is normal that the actual power consumption will be higher than the indicated value.

Common problems, simple causes and solutions

Simple causes and solutions

Fault	Possible cause	Remedy
No cooling at all	The power supply plug is not properly inserted, blown supply fuse, or no power supply	Properly insert the power supply plug; replace the fuse; and check if there is a power failure.
Internal temperature higher than expected	<ul style="list-style-type: none"> ■ The freezer door has been kept open for a long period; ■ Excessive amount of fresh food placed into the freezer compartment at one time. ■ The set step is too low or the ambient temperature is too high. 	<ul style="list-style-type: none"> ■ Close the freezer door. ■ Food put into the freezer compartment at one time shall not exceed the maximum freezing capacity of the refrigerator. ■ Adjust the setting.
The refrigerating system is operating but the cooler compartment lamp is not on.	<p>The bulb is blown.</p> 	<p>Replace the bulb</p> <ul style="list-style-type: none"> ■ The power supply plug must be removed before replacing the bulb. ■ Remove hood A and unscrew the bulb in an anti-clockwise direction. ■ Replace with a new bulb by screwing it clockwise (15W/220V E14).
The bottom of cooler compartment is wet or draining water is blocked.	The water outlet hole on the drain trough has been blocked	Clean the water outlet hole on the trough by reference to "Cleaning" on Page 14.

If any of the problems cannot be solved after following the above tips, please contact our local customer service center.

Customer service guarantee (for household use):

We provide guaranteed free service for one year for the whole appliance and for three years for the main components (starting from the date of buying as indicated on the invoice).

When you need normal inquiry or maintenance, please contact our local customer service center with your invoice.

When making inquiry or requesting repair service, please state the product code (Product code E-Nr., on the back panel of the refrigerator).

Technical specification

Technical specification

PARAMETERS \ MODEL	KG15V31TI KG15V41TI	KG18V31TI KG18V41TI	KG20V31TI KG20V41TI
Climatic type	SN/ST	SN/ST	SN/ST
Star mark	***	***	***
Total effective volume (L)	150	174	198
Effective volume of freezer (L)	53	51	75
Freezer temperature (°C)	≤ -18	≤ -18	≤ -18
Power supply	220V 50Hz	220V 50Hz	220V 50Hz
Freezing capacity (kg/24h)	3	3	4
Energy consumption (kW · h/24h)	0.77	0.79	0.79
Refrigerant type	R600a	R600a	R600a
Filling amount of refrigerant (g)	54	56	65
External dimensions (mm)	495 × 635 × 1250	495 × 635 × 1400	495 × 635 × 1550
Input power (W)	100	105	105
Net weight (kg)	48	51	56
Model name electrical safety classification	I	I	I

PARAMETERS \ MODEL	KG21V31TI KG21V41TI	KK24V31TI KK24V41TI
Climatic type	SN/ST	SN/ST
Star mark	***	***
Total effective volume (L)	213	254
Effective volume of freezer (L)	75	84
Freezer temperature (°C)	≤ -18	≤ -18
Power supply	220V 50Hz	220V 50Hz
Freezing capacity (kg/24h)	4	5
Energy consumption (kW · h/24h)	0.70	0.61
Refrigerant type	R600a	R600a
Filling amount of refrigerant (g)	64	71
External dimensions (mm)	545 × 638 × 1550	595 × 660 × 1700
Input power (W)	110	110
Net weight (kg)	60	68
Model name electrical safety classification	I	I

Packing list

Packing list

Description \ Type		KG15V31TI KG15V41TI	KG18V31TI KG18V41TI	KG20V31TI KG20V41TI
Accessories in the case	Safe glass shelf	1	2	2
	Glass partition tray	1	1	1
	"Vario" shelf	1	1	1
	Vegetable basket	1	1	1
	Freezer drawer	3	3	4
	Ice-maker	1	1	1
Door accessories	Short bottle tray	1	1	1
	Small bottle tray		2	2
	Large bottle tray	1	1	1
Printed documents	Instruction manual	1	1	1
	Customerservice	1	1	1
	Certificate	1	1	1

Description \ Type		KG21V31TI KG21V41TI		KK24V31TI KK24V41TI
Accessories in the case	Safe glass shelf	2		3
	Glass partition tray	1		1
	"Vario" shelf	1		1
	Vegetable basket	2		2
	Freezer drawer	4		4
	Ice-maker	1		1
Door accessories	Short bottle tray	1		1
	Small bottle tray	3		4
	Large bottle tray	1		1
Printed documents	Instruction manual	1		1
	Customerservice	1		1
	Certificate	1		1

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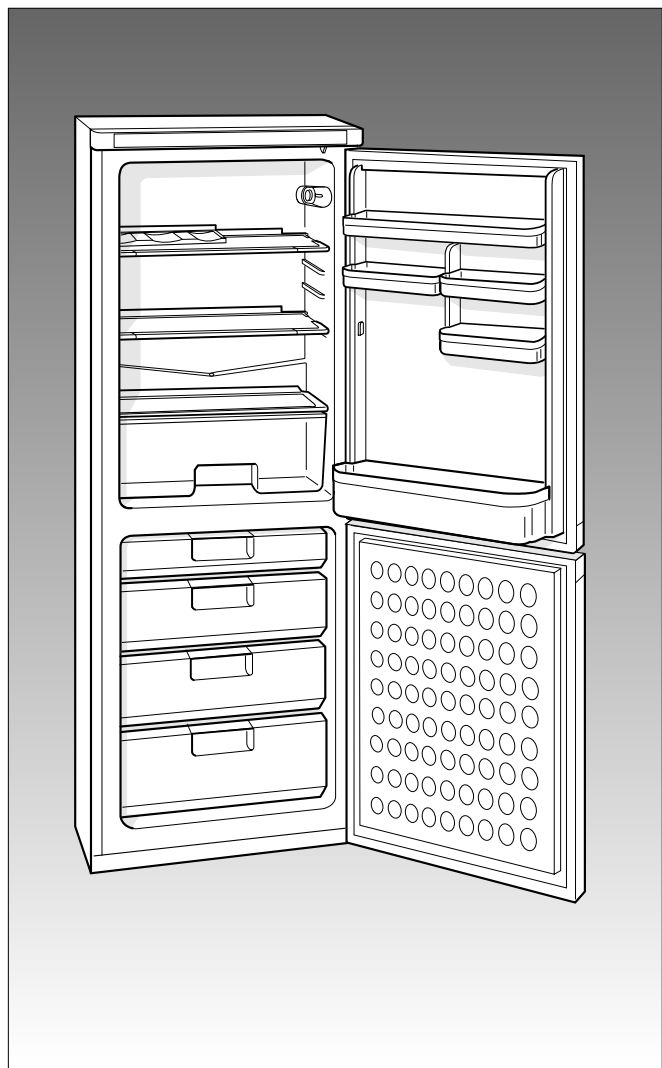
<http://www.siemens-ha.com.cn>

Toll-free customer hot line: 8008289828

If not accessible, dial 025-4716766

E-mail: Careline.China@BSHG.com

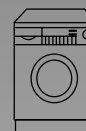
Operating Instructions



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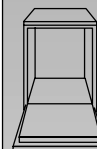
WM



RF



DW



CH

