Technical Manual

DEEP FREEZER







RCHT10SDBRV16
RCHT20SDBRV16
RCHT35DDBRV16
RCB45DDBRV16
RFGT45GLBRV16
RCHT45DDBRV16
RCHT55DDBRV16

3P834387-1C

DAIKIN

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Digit	Description
1	R - Refrigeration
2	S - Standard Cooler (0 °C to + 8 °C) F - Freezer Only (-31 °C to -13 °C) C - Convertible (-31 °C to + 10 °C) CB - Combi Cooler & Freezer (Freezer -20°C to -15°C, Cooler 0° to +7°C)
3 & 4	HT - Hard Top GT - Glass Top VC - Visi Cooler
5 & 6	Gross Volume (35*10 = 350 litre)
7 & 8	DD - Double Door SD - Single Door GL - Glass Lid
9	B- Major Design Category (Progress according to design change)
10	R/S - Minor Design Category (Progress according to design change)
11 & 12	Power Supply V1 - 1ph / 50Hz / 230 V
13	6 - India

2. Specification

Model no.	RCHT10 SDBRV16	RCHT20 SDBRV16	RCHT35 DDBRV16	RCHT45 DDBRV16	RCHT55 DDBRV16	RFGT45 GLBRV16	RCB45 DDBRV16
Net Unit Dimension (mm)	580 X 630 X 845	940 X 630 X 845	1100 X 740 X 845	1390 X 740 X 845	1680 X 740 X 845	1390 X 740 X 810	1390 X 740 X 845
Storage Volume (ltr)	99	200	309	410	518	370	C- 201 / F- 171
No. of Doors	1	1	2	2	2	2	2
No. of Basket	1	1	2	2	2	3	2
Refrigerant Type (g)	R600a	R600a	R600a	R290	R290	R290	R290
Temperature Range	-31 to +10 °C	-31 to +10 °C	-31 to +10 °C	-31 to +10 °C	-31 to -10 °C	-31 to -13°C	-27 to -12°C
Puff Thickness (mm)	70	70	70	70	70	70	70
Gross dimension (mm)	650 X 670 X 880	1015 X 670 X 900	1175 X 780 X 900	1465 X 780 X 900	1755 X 780 X 900	1465 X 780 X 850	1465 X 780 X 900

Note: Design Specs may change without any prior notice due to Continuous R & D improvement.

3. Instructions

Thank you for choosing Daikin Product.
Please read these instructions carefully. They provide details and advice on the correct method of installing, using and maintaining this unit, in order to obtain maximum reliability, efficiency and long life. Technical specifications are subject to change without notice.

Limitation of liability

All the details in this manual are compiled in consideration of the standards and legal regulations applicable at this time, as well as the experience of the manufacturer and qualified staff. The manufacturer accepts no liability for damage to persons or property (devices, goods, etc.) resulting from:

- Non-observance of the manual and the regulations/safety instructions contained therein.
- Failure to comply with the local safety regulations.
- Inappropriate use (foreseeable misuse).
- Use of unauthorized and non-trained staff.
- Unauthorized equipment conversions and technical modifications by the operator himself.
- Use of spare parts not approved by the manufacturer.
- Failure of the power supply or electro technical safety devices.
- Typesetting and print errors.

Failure to observe the above points will invalidate the warranty claims.
The contractual obligations agreed to under the contract, the general terms and conditions of sale and delivery of the “Daikin Air conditioning India Private Limited” and the statutory provisions applicable at the conclusion of the contract apply.
Technical specifications are subject to change without notice.
The local commercial law regulations and safety regulations/provisions and the essential health and safety requirements of the device apply.

Intended use

Depending on the series, the device is suitable for the storage of packaged cooled or packaged deep-frozen food products.
The operator is responsible for the correct operation of the devices.
Operate the device in a stable operating position (horizontal alignment).
Operate the device only mounted on the Feet.
Operate the device only with a provided Cover.
Danger from foreseeable misuse

- No technical modifications may be made to the device.
- Steam or high-pressure cleaners may not be used for basic cleaning.
- Do not store explosive substances, e.g. aerosol containers with flammable propellant gas, in this device.
- The device may only be operated if all the required safety devices are present and fully functional.
- The sides of freezer may get warm during operation . This is not abnormality . This is designed for prevention of moisture on outer body .

Product Loading Instruction:

1. Product Loading should be 10mm away from inner surface.
2. Store below this line (as shown in Fig.A, Fig.B, Fig.C and Fig.D).
   Fig. A & Fig. B Refer for Hard top models, Fig. C Refer for Glass top models and Fig. D Refer for Combi models.

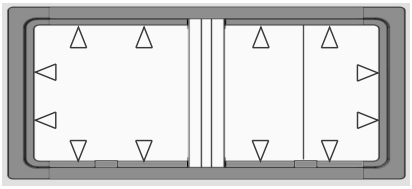


Fig. A

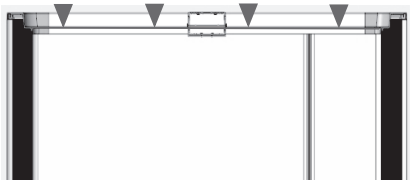


Fig. B



Fig. C

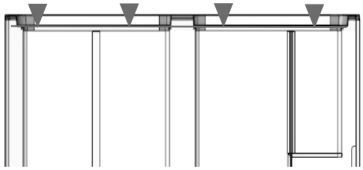


Fig. D

Material and property damage from foreseeable misuse.

- Regularly check that the device is in good condition. Damage must be repaired immediately.
- Before storing the goods and during operation, the temperature must be checked for correctness.
- Stored goods must be checked by the operator in the case of power failure (temperature control).
- Check regularly for foreign objects in the goods area. Incorrectly stored goods must be removed immediately.
- Regularly check that the top cover is closed.
- Operation of a device with damaged cover / element (crack, fissure, breakage) is no longer possible.
- Remove goods from the damaged device and rearrange in a functional device with the same product
- Switch off the damaged device after removing the goods.
- Contact the maintenance service.
- Do not apply stickers or film to the surfaces.
- Observe the minimum distances to the boundary walls and to other devices to avoid hindrance to air.
- Do not use the cover as storage place for diverse objects.

4. Safety recommendations

When installing and using the unit please follow the recommendations listed below.

- Installation shall be carried out in strict compliance with the diagrams and instructions supplied by the manufacturer.
- Damages due to improper connections are excluded.
- The electric system available where the unit is installed shall meet the relevant standards in force.
- Maintenance shall be effected by trained personnel or by the manufacturer.
- Only staff trained in handling combustible refrigerants may perform work on the refrigerant circuit of R-290/R600a devices.

The user is strongly recommended to contact the manufacturer before attempting any intervention on the unit and any use not corresponding to the manufacturer's indications (in particular as for the field of application) and to enquire about the possible dangers and contra-indications connected with an improper use of the machine.

- The unit shall be used following these instructions and sticking to the destination of use indicated by the supplier. Any incorrect use can result in damages to the unit and represents a serious danger for people's health.

ATTENTION

The unit is not suitable for working in explosive environments. Therefore, the use of the unit in an explosion-dangerous atmosphere is absolutely forbidden.

ATTENTION

The unit is not suitable for working in salty environments. In such a case protect condenser and evaporator with appropriate means.

When maintenance involves operations on the refrigerating circuit, empty the system and let it reach the atmospheric pressure.

WARNING

- Do not discharge the refrigerant in the atmosphere. It must be recovered by specialized technicians using suitable equipment.
- Quantity and quality of the refrigerant to be charged are indicated on the data plate.
- Do not use refrigerants of different kind (especially inflammable fluids, for example hydrocarbons) or air.
- Do not modify or alter the refrigerating circuit or its components (for example: welding on compressor body)
- The final user shall protect the system from external fire dangers.

Refrigerant circuit

- Work on the refrigerant circuit must only be performed by qualified staff.
- Protect hands and face from contact with fluid/leaking refrigerant.
- Wear protective goggles and gloves. Fluid refrigerant causes frostbite on the skin.

Material, property and environmental damage caused by damage to the refrigerant circuit.

- Do not expose the device during storage and transport to temperatures higher than 70°C (158°F).
- Avoid transmission of pulsations and vibrations to the device.

- Avoid external force to the device such as careless movements with floor trucks or floor cleaning machines.
- Drilling or other work on the device is not permitted.
- Do not squeeze or bend pipes.
- To accelerate the defrosting process, do not use any mechanical devices or other means (e.g. ice scrapers).
- Steam or high-pressure cleaners may not be used for basic cleaning.

Combustible refrigerant

Safety and warning information for devices with combustible refrigerants.

WARNING

IMPORTANT REFRIGERANT AWARENESS

REFRIGERATION SYSTEM CHARGE WITH FLAMMABLE REFRIGERANT



WARNING:

RISK OF FIRE/ FLAMMABLE MATERIALS

R290/R600a

(Refrigerant grade Propane only)

Insure all operatives are aware of the cabinet being charged with the highly flammable refrigerant

- The refrigerant R-290 and R-600a belongs to safety group A3 according to DIN EN 378-1.
- The refrigerant used and the fill quantity are indicated on the power rating plate.
- If leaks occur, the refrigerant can escape and create an explosive gas/air mixture. This can lead to fire and explosion with subsequent fire risk.
- Keep away from ignition sources (heat, sparks, open flames, hot surfaces).
- To remove condensation and for cleaning, use a damp cloth or sponge.
- Do not use dry cloths or sponges for rubbing dry. (Danger of electrostatic charging and sparking).
- Requirements for the installation area:
  - The device must only be installed in well-ventilated areas.
  - Do not install the device in cellars or lowered areas.
  - Channels and wall penetrations must be sealed underneath and behind the device, in accordance with fire protection laws.
- Do not close venting openings in the device housing. Use only original accessory parts.
- Do not damage the refrigerant circuit.
- Do not operate any electrical devices (e.g. wet vacuum cleaners) within the refrigerator compartment that are not of the type recommended by the manufacturer.
- Steam or high-pressure cleaners may not be used for basic cleaning.

- Work on the electrical system and the refrigeration system must only be performed by qualified staff (staff trained in flammable refrigerants).
- Opening the refrigerant circuit and suctioning of the refrigerant may only be performed in a well ventilated area outside of business hours of the market (without customer traffic) or outdoors.
- Disconnect the device before each maintenance/repair.
  Secure the device against restarting.
- During repairs, a knowledgeable person who knows the local conditions must be available as the contact person for the Daikin-authorized qualified staff.
- Dispose of devices with flammable refrigerant and devices with insulating foam (thermal insulation polyurethane foam with pentane) appropriately. Inquire with the responsible authorities about the safety and statutory disposal regulations applicable to you.
- The product was designed to take into account the environmental and disposal friendliness of devices. The refrigerant R-290 and the propellant pentane (for the insulating foam) do not have any ozone depletion potential and do not contribute directly to the greenhouse effect.

5. Operation of Unit

Getting Started

- Unpack the machine and choose a well-ventilated spot close to an electrical Socket - Allow sufficient clearance from the walls to dissipate heat, preferably 8 inches (200mm) at the back & side. Keep your appliance away from direct sunlight and other high temperature sources like ovens and cooking ranges.
- Avoid damp, exposed locations.
- Avoid carpeted areas.
- The Cabinet must stand on an even base. If the base is uneven, the cabinet can be adjusted using adjustable feet (some models only). A Stable installation minimizes noise and vibration.
- If the Deep Freezer is installed in areas with high humidity like the basements, garages or in cold weather, there are chances of water droplet formation on the outer surface due to condensation. This is quite normal and not a fault. Remove the condensation by wiping with a dry cloth.

6. Control Panel

Before operating for the first time, it is important to understand its control panel. This manual provides step-by-step guidance on operating the deep freezer with a smart electronics controller system. It ensures efficient usage, energy savings, and safety.

Turning ON the Controller

- Press the power button to switch on the controller.
- **For Hard Top:**
  The display will briefly show the version number **"1.0.*" (* indicates 1,2,3,4,5 ... Version Number)** and then display the current ambient temperature.
- **For Glass Top:**
  The display will briefly show the version number **"Gt" (indicates 1,2,3,4,... Version Number)** and then display the current temperature.

Temperature Adjustment

For Hard Top:

• Use the “+” key to increase the temperature (up to +10°C).

• Press and hold the “+” key for 4 seconds to jump directly to +10°C.



For Glass Top:

• Use the “+” key to increase the temperature (up to -13°C).

• Press and hold the “+” key for 4 seconds to jump directly to -13°C.



For Hard Top & Glass Top:

• Use the “-” key to decrease the temperature (down to -31°C).

• Press and hold the “-” key for 4 seconds to jump directly to -31°C.



• The default temperature is set to -24°C for HT & -28°C for GT. Adjust as needed.

• The display will blink for 5 seconds to confirm the set temperature.

The Child Lock Feature

Press and hold the Lock/Unlock key for 4 seconds to activate the child lock.
The display will show “Loc”, and the lock indicator LED will turn ON.



To deactivate the child lock, press and hold the same key for 4 seconds.
The display will show “UnL”, and the LED will turn OFF.



Daily Operations

Power ON: Ensure the display shows normal operation indicators.
Set Desired Temperature: Adjust and confirm using the “+” or “-” keys.
Monitor Energy-Saving Mode: Check for normal operation and ensure the freezer door remains closed to save energy.
Monitor Operation: Periodically verify the temperature display and listen for normal compressor activity.

Tips

Routine Maintenance:
Door Seals: Inspect and clean to prevent cold air leakage.

Ventilation: Keep vents and compressor areas free from dust.
Energy-Saving Tips: Avoid frequent opening of the freezer door to minimize compressor cycles.
Safety Tips: Always activate the child lock to prevent unintended use.
If the display shows “E1”: Contact Dealer (Causes of E1 error-When temperature sensor open / Cabinet wire for temperature sensor open / Sensor connection loose).

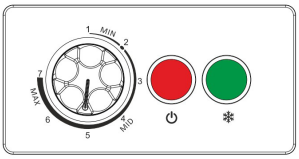


If the display shows “E2”, Contact dealer. (Causes of E2 error-When temperature sensor resistance is high, above 600K).



If any key is not operating, wait for 60 seconds.
Power OFF: Switch off the system if unused for extended periods.

For Mechanical controller



- The Red lamp lights up whenever the freezer is connected to live electricity supply.
- The Green lamp light will glow to indicate the working of compressor.

Caution

- To avoid the risk of children becoming trapped and therefore suffocating, do not allow them to play around or hide inside the cabinet.
- Check for transit damage to your appliance and if any, report to the company dealer / distributor you may have purchased from within 24 hours of delivery.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Do not spray or wash the freezer. Do not put the freezer in moist places as this may affect the electrical insulation properties of the freezer.
- Avoid switching on/off the appliance consecutively to prevent damage to the compressor.

Getting Connected

- Ensure that the electrical point is properly earthed. Avoid extension cords for complete safety. Do not cut / remove the round earthed pin from the socket. If using a separately fused circuit, ensure that the fuse is rated at 15 amps.
- Leave the door open for a few hours. Use a soft cloth and a mild solution of liquid detergent to clean the interior and exterior of the machine.
- Plug into a 3 pin electrical socket & switch on.
- The digital controller has been factory set to provide appropriate cooling. However, if need be, decrease temperature for more cooling, or increase the temperature to reduce cooling.
- Set the temperature in the digital controller at the cooling level you want and load after

continuously running for 6 hours for normal machine and 30 hours for eutectic freezer. The temperature control is placed in the compressor compartment.

- Do not overload the cabinet or block the air circulation inside the appliance. Leave adequate space around stored products for uniform cooling.
- Do not frequently change the temperature setting during normal operation. Allow sufficient time (4–6 hours) after each setting adjustment for the cabinet temperature to stabilise.
- When the machine is switched on, you may hear clicking gas flow sound, and compressor humming sound. These are normal sounds and not a cause for concern.
- Do not load the appliance immediately after it is switched on. Wait until the correct storage temperature has been reached. We recommend you to check the temperature with an accurate thermometer.
- Defrost when a frost layer of around 7mm (1/4") has formed.
- 6 hours before the defrosting, please set the digital controller at minimum temperature to make sure the food is at the lowest temperature when you get it out. All food should be wrapped in several layers of newspaper and stored in a cool place..
- The manufacturer declines all liabilities for injury to persons and animals or damage resulting from failure to observe these regulations.
- Check the transit damage to the machine and if any, report to company within 24 hours of delivery.

7. Handling

The unit can be handled by lifting and transport means:

- Make sure that no one is in transit in the operating area of the lifting/transport means to prevent any possible accidents to people.
- If the unit is in a wooden case or crate, sling the packing properly before handling it.
- Lifting speed shall be such as not to make the packed unit oscillate dangerously and possibly fall.

Transport and Storage

Check the device for transport damage after delivery. Contact the maintenance service in case of damage to refrigerant circuit. The refrigerant can escape and create an explosive gas/air mixture. Risk of fire will be there..

- Do not expose the device during storage and transport to temperatures higher than 70°C (158°F).
- Ensure good ventilation.
- In event of damage, contact the maintenance service.

Transport the device with floor trucks. Risk of injury to persons during collisions.

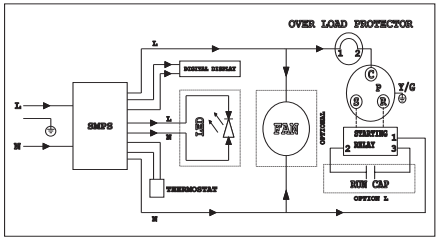
- Observe the transport routes for floor trucks.
- Secure the cargo.
- Floor trucks must only be operated by trained persons.
- Observe the details for the stacking height on the packaging.

8. Installation and Use of Freezer

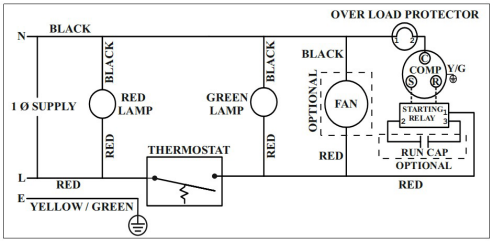
- Keep freezer away from heat and direct sunlight. Do not place the freezer in moist or wet places to prevent rust or reduction of insulating effect. The space above the top of the freezer shall be greater than 80cm. The distance from both sides and the back shall be more than 20cm. This facilitates the opening & closing and heat dissipation. Wipe the freezer inside and outside with a warm moist rag (add a small amount of detergent in the warm water. Use plain water for the cleanse).
- Do not switch on the connection power until 6 hours after moving the freezer. The refrigerant needs time to settle. Before placing frozen foods in your freezer, turn the freezer on and wait for 6 hours to make sure it is working properly and to allow the freezer to chill down to the optimum temperature. Temperature can be measured using a thermometer. Take care to maintain the temperature as recommended by food suppliers.
- Prepare foodstuff for freezing in small portions to ensure rapid freezing.
  Don't put liquid-filled bottles or sealed cans containing carbonated liquids into the freezer as they may burst.
- Try avoid dual loading of liquid food long with frozen food, usage of same may detoriate the performance of product.
- Fresh Meat should not be stored in chest freezers.
- Fresh product should not be stored with ice cream in a freezer.
- No liquid should be stored.
- If you want to store fresh food product set temperature to +5°C in convertible models.
- Don't store milk packets and dairy products in chest coolers.

9. Electrical Control – Wiring diagram

For Digital Controller :



For Mechanical Knob Controller :



10. Check, Regulation and Adjustments

Before turning the unit on, check that:

- Locking Screws are tight.
- Electrical connections have been carried out correctly.

In the event unit has been opened, check that:

- No tools are left inside.
- Assembly is correct.
- There is no gas leakage.
- Front cover is secured correctly.

Starting:

Before Starting the unit act as follows:

- Connect the unit to the Mains. The luminous switch lights up.
- Switch on the controls.
- Set the required cabinet temperature.

11. Wiring and Safety Devices



ATTENTION

Before connecting the unit make sure that mains voltage and frequency correspond to the values shown in the data plate. Voltage tolerance. ±10% compared to nominal value.

- Electric connection Connect the unit after checking the panel components.



ATTENTION

Connection to the electric line shall be effected applying a suitable safety device (a circuit breaker or a ground fault interrupter} selected by the installer on the basis of the fine involved and of the absorption indicated on the unit plate.

If a cold room includes more units, each unit shall be provided with its own safety device. Connect the unit paying attention to the colours of the supply cable wires.

WARNING:

- Any defective electrical part should be replaced by trained personnel exclusively. The electric connection should be effected by qualified personnel & electrical control.

ATTENTION:

- Young children or persons without supervision can't operate the appliance.
- Young children should be supervised not to play with the appliance.
- We have a policy of improving our product and reserve the right to change materials and specifications without notice. Please check specific parameters on the rated label of the product.

12. Maintenance and Repair

- Suitable maintenance is crucial for obtaining longer life, perfect working conditions and high efficiency of the unit as well as for ensuring the safety features provided by the manufacturer.
- Before cleaning, always switch off the power supply and remove the plug from the socket. Take out all items from the machine.
- Use mild liquid detergent solution or a synthetic detergent to clean all the parts and the inside & outside of the machine.
- Wipe dry with soft cloth. Leave the door open for a while.
- Plug the power cord in and switch on. Allow the machine to cool for 3 hours.
- To polish, use liquid silicon or a good quality automotive or appliance wax polish.

Routine Maintenance

- Good operation of the unit requires condenser to be cleaned periodically (Frequency of the cleaning depends on the environment where the unit is installed).
- Turn off the unit and clean it by blowing air from the inside outwards. If no air jet is available, use long haired brush and work on the outside of theCondenser.

Periodic Maintenance:

Periodically check wear condition of electrical contacts and switches, if necessary replace them. Service Operation to be carried out by Qualified technicians or by Manufacturer exclusively.

Under no circumstances the user is allowed to:

- Replace Electrical Components.
- Work on Electrical Equipment.
- Repair Mechanical Parts.
- Work on Refrigeration system.
- Work on the digital controller.
- Work on Protection and safety Device.

13. E-Waste Guideline

PROTECT THE ENVIRONMENT FROM E-WASTE (GUIDELINES)

MEANING OF E-waste under E-waste (Management) Rules, 2022 (E-waste Rules) -Waste electrical and electronic equipment, whole or in part of reject from their manufacturing and repair process, which are intended to be discarded.



Our product is RoHS compliant.

Don't dump Electrical and Electronic Products in Garbage Bins

DO'S & DONT'S

DO'S	
Run and maintain the Deep Freezer as per the instruction given in the operation / instruction manual	✔
Ensure that an authorised person repairs your Deep Freezer	✔
Call our local authorised dealer or our toll free number to dispose your Deep Freezer	✔
Contact an authorised dealer in case or installation or de-installation	✔
Consult our local authorised dealer or our toll free number on the life span of the Deep Freezer	✔

DONT'S	
Do not try to repair your Deep Freezer on your own	✘
Do not sell or dispose your Deep Freezer or parts to an unauthorised Kabbadi wala / Scrap Dealer / Rag pickers	✘
Do not dismantle your Deep Freezer on your own	✘
Do not get your Deep Freezer or any parts repaired by an unauthorised person	✘
Do not dispose off the E-waste in landfills	✘
Do not use the Deep Freezer as furniture after its use	✘

14. Trouble Shootings

In case of any difficulty, please refer to this trouble-shooting guide. You may well be able to handle the problem yourself and save time. But if the problem still remains, please contact our customer care Centre.

Problem	Possible Cause	Remedial Measures
Product does not work	• Supply voltage low (below 165V)	• Use a suitable automatic voltage stabilizer which meets product specification
	• Power cord plug removed or loosened from electronic wall socket	• Reset properly, if necessary
	• No light visible in digital controller.	• Remove the power cord and insert power cord to start the machine again
Power is on but no cooling	• Supply Voltage low (below 165V)	• Use automatic voltage stabilizer recommended by the company
Insufficient cooling	• The Door is not shut properly	• Check and close the door properly
	• Temperature of room is very high or direct sunlight is falling on the product	• Install the machine in a cooler place
	• Incorrect setting of temperature control system guard	• Manually set temperature from digital controller
	• Supply voltage low (below 165V)	• Use an automatic voltage stabilizer which meets ISI specification
	• Machine is too close to the wall	• Maintain at least 8 inches gap between the machine and the wall
Smell in the machine	• Items with excessive pungent smell	• Wrap such items in a polythene or stored in the machine. Keep in closed containers
Condensed water accumulating inside the machine	• Machine not on levelled ground	• Re-level the cabinet as explained in earlier section
	• Drain pipe is clogged	• Clean by the drain pipe
Machine unstable or vibrating	• Cabinet is not levelled properly	• Re-level the cabinet by adjusting position of legs as applicable
Electric Shock from the appliance body	• Wiring of premises not earthed properly	• Check proper earthing in your socket
	• Shock on your stabilizer	• Replace your stabilizer
Gas flow noise from freezer	• This noise is normal	• Call your electricians
Excessive cooling	• Digital controller at low temperature setting.	• Digital controller at high temperature setting

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Gurugram-122002

Daikin Refrigeration Business Helpline
Helpline number: 1800 102 9322
Operational window: 8 am to 8 pm
Operational Days: Mon-Sat
Email id:
serviceREF@daikinindia.com
https://www.daikinindia.com/cold-chain-solution