



# ELECTRIC ICE BOX



Portable Fridge/Freezer Manual

# Thank you for choosing our HULK 4X4 Electric Ice Box Fridge.

Please read this manual carefully before starting the device. Keep it in a safe place for future reference. If the device is passed on to another person, this manual must be handed over to the user along with it.

The manufacturer cannot be held liable for damage resulting from improper usage or incorrect operation .

## Table of Contents:

1. Explanation of symbols	03
2. Safety instructions	03 - 05
3. Scope of delivery	05
4. Function description	06
4.1 Scope of functions	06
4.2 Operating and display elements	06 - 07
5. Operation	08
5.1 Before initial use	08
5.2 Energy saving tips	08
5.3 Connecting the cooler	08
5.4 Using the cooler	08
5.5 Setting the temperature	09
5.6 Using the battery monitor	09
5.7 Downloading Bluetooth APP	09
5.8 Setting the Bluetooth signal and connecting to the APP	09
5.9 USB port for power supply	10
5.10 Defrosting the cooler	10
5.11 Replacing DC fuse	10
5.12 Replacing the fuse of the DC plug	10
5.13 Replacing the light PCB	10
6. Cleaning and maintenance	11
7. Troubleshooting	12 - 14
8. Guarantee	15
9. Disposal	15
10. Technical data	16 - 17

# 1 Explanation of Symbols



## DANGER!

**Safety instruction:** Failure to observe this instruction will cause fatal or serious injury.



## CAUTION!

**Safety instruction:** Failure to observe this instruction will cause fatal or serious injury.



## NOTICE!

Failure to observe this instruction will cause material damage and impair the function of the product.



## NOTE!

Supplementary information for operating the product.

## 2 Safety Instructions

### General requirements for all instructions :

- GWP: R134a: 1430
- This appliance is not apply 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.
- Children should be supervised to ensure that they do not play with the appliance .
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Cleaning and user maintenance shall not be made by children without supervision .
- Children aged 3-8 are allowed to take or put food in the refrigerator.
- It must only be supplied at safety extra low voltage corresponding to the marking on the appliance.
- If the supply cord is damaged , it must be replaced by the manufacturer, its service agent or a similarly qualified person in order to avoid a hazard .
- This product can not exposed to the rain during camping use .

### CAUTION

- Please keep the products away from the fire or similar glowing substance before you dispose the refrigerator.
- Disconnect the power supply before cleaning and maintenance.
- Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance.
- This appliance is intended to be used in household and similar applications such as
  - staff kitchen areas in shops , offices and other working environments;
  - farmhouses and customer housing in hotels, motels and other residential type environments;
  - bed and breakfast type environments;
  - catering and similar non -retail applications.

## **WARNING**

Ensure the supply cord is not trapped or damaged when placing the appliance.  
Do not locate multiple portable socket-outlets or portable power supplies at the rear of the appliance.

### **To avoid contamination of food , please respect the following instructions:**

- Opening the door for long periods can cause a significant increase of the temperature in the compartments of the appliance.
- Clean regularly surfaces that can come in contact with food and accessible drainage systems.
- Store raw meat and fish in suitable containers in the refrigerator, So that it is not in contact with or drip onto other food.
- If the refrigerating appliance is left empty for long periods, switch off, defrost, clean, dry, and leave the door open to prevent mould developing within the appliance.

### **Correct Disposal of this product**

This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

## **WARNING**

- Do not operate the cooling device if it is visibly damaged.
- If this cooling device's Power cable is damaged , it must be replaced by the manufacturer, customer service or a similarly qualified person in order to prevent safety hazards.
- If the power cord of the refrigerator is damaged, it must be replaced to prevent safety hazards
- This cooling device may only be repaired by qualified personnel. Improper repairs can lead to considerable hazards.
- This cooling device can be used by children aged 8 years or over, as well as by persons with diminished physical, sensory or mental capacities or a lack of experience and/or knowledge , providing they are supervised or have been taught how to use the cooling device safely and are aware of the resulting risks.
- Cleaning and user maintenance must not be carried out by children without supervision.
- Children must be supervised to ensure that they do not play with the cooling device.
- Always keep and use the cooling device out of the reach of children under the age of 8 years.
- Do not store any explosive substances such as spray cans with a flammable propellant in the cooling device.

## **CAUTION**

- Before starting the refrigerator, make sure the power cord and plug are dry.
- Disconnect the cooling device from the power supply
  - before each cleaning and maintenance
  - after every use
- Food may only be stored in its original packaging or in suitable containers.
- Only plug front and rear DC plug separately, never plug front and rear DC plugs at the same time.

## NOTICE

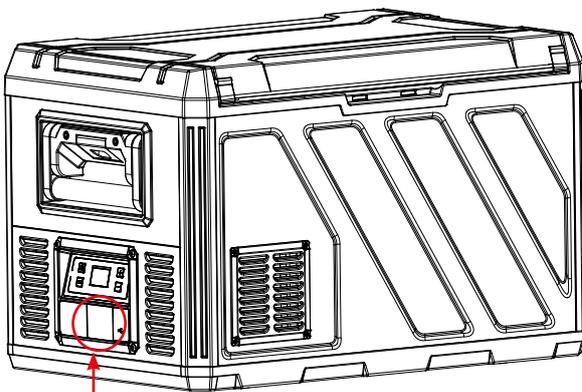
- Check that the voltage specification on the type plate corresponds to that of the energy supply.
- Only connect the cooling device as follows:
  - With the DC Connection cable to a DC Power supply in the vehicle
  - Or with the AC Connection cable to an AC Power supply · Never pull the plug out of the socket by the cable .
- If the refrigerator is connected to a DC Outlet: Before connecting the fast charging device , disconnect the refrigerator and other power-consuming devices from the battery.
- If the cooling device is connected to a DC Outlet: Disconnect the cooling device or switch it off when you turn off the engine . otherwise you may discharge the battery
- The cooling device is not suitable for transporting caustic materials or materials containing solvents .
- The insulation of the cooling device contains flammable cyclopentane and requires special disposal procedures. Deliver the cooling device at the end of its life-cycle to an appropriate recycling center.
- Do not use electrical devices inside the cooling device unless they are recommended by the manufacturer for the purpose...
- Do not place the cooling device near naked flames or other heat sources (heaters , direct sunlight , gas ovens etc.)
- Ensure at all times that there is a minimum of 50 mm ventilation on all four sides of the cooling device.
- Keep the ventilation area free of any objects that could restrict the air flow to the cooling components.
- Do not place the cooling device in closed compartments or areas with none or minimal air flow.
- Ensure that the ventilation openings are not covered . Do not fill the inner container with ice or fluids .
- Never immerse the cooling device in water.
- Protect the cooling device and the cable against heat and moisture .

## 3 Scope of Delivery

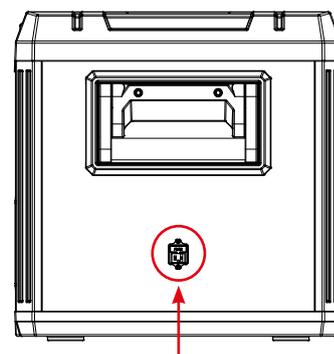
NO.	QUANTITY	DESCRIPTION
1	1	Cooler
2	1	Connection Cable for DC Connection
3	1	Connection Cable for AC Power Supply
4	1	Operating Manual

**Note:** only single DC version with adapter.

## CAUTION



12V DC (Front)



12V DC (Rear)

**Caution:** Only plug front and rear DC plug separately, never plug front and rear DC plugs at the same time.

# 4 Function of Description

This is a portable cooler . A fast-acting and efficient cooling system provides maintenance-free cooling performance with a thick insulation, powerful compressor and control module, and the cooler can withstand a heel (inclination) of 30° within a short period of time.

(Note: During working, if the inclination exceeds 15°, the compressor noise will increase accordingly.)

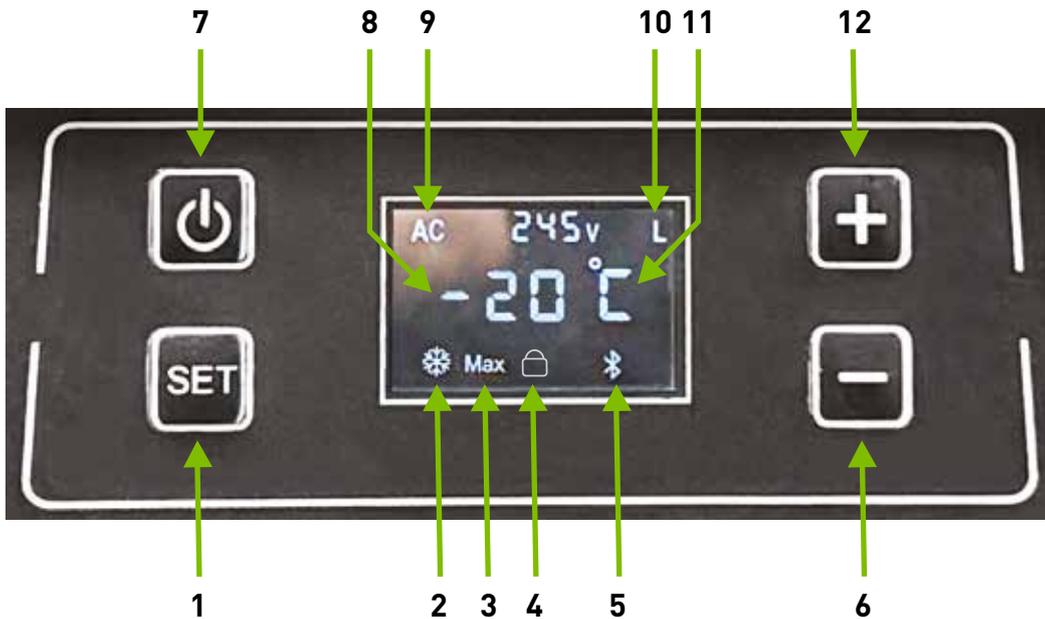
## 4.1 Scope of Functions

- Power supply with AC power supply for connecting to the AC mains
- Three-level battery monitor to protect the vehicle battery
- Display with temperature gauge in °C and °F
- Temperature setting: with two buttons in steps of 1°C (1F)
- Bluetooth APP Control
- USB Port for power supply, such as mobile phones
- Removable basket.
- Internal lighting
- Anti-button touch protection function

## 4.2 Operating and Display Elements

NO.	DESCRIPTION	DESCRIPTION
1		Switches the cooler on or off when the button is pressed for one or three seconds.
2	<b>Display</b>	DC: DC connection is on AC: AC connection is on H/M/L: Battery voltage protection gear °C/°F: Temperature unit symbol  : Compressor is on  : Bluetooth is on MAX: Maximum cooling mode ECO: Energy-saving cooling mode  : Dynamic lock screen function
3	 	Press the "+" button to increase the temperature gauge or function selection. Press the "-" button to decrease the temperature gauge or function selection.
4		Press "  " to select the function or save the setting memory

## Display Panel



- |                                      |   |
|--------------------------------------|---|
| 1. Setting button                    | 7. ON/OFF button                                |
| 2. Compressor operation instructions | 8. Temperature gauge display                    |
| 3. MAX/ECO function mode switching   | 9. DC voltage detection                         |
| 4. Anti-touch function display       | 10. ABS battery voltage protection gear setting |
| 5. Bluetooth function display        | 11. °C/°F Celsius or Fahrenheit display         |
| 6. Down “-” button                   | 12. Up “+” button                               |

## Button Settings

A. ON/OFF switch button, short press 1s, then release the button, the device is ON; long press 3s, then release the button, the device is OFF.

ON: The LCD display lights up and the device starts cooling.

OFF: The LCD display lights out and the device stops working.

B. Setting button, short press for 1s, then release the button to select and set the temperature; long press for 3s, then release the button to select and determine the battery voltage range (H/M/L range), Temperature unit (°C/°F), MAX/ECO mode switching.

1) Temperature setting: Short press the Setting button for 1s, then release the button, the temperature figure starts to flash, press “+” to set the parameters; and then short press the Setting button for 1s or stop pressing the button for more than 10s to complete the setting.

2) When the refrigerator starts the Bluetooth is always on, and you can use the mobile app to connect the Bluetooth to control refrigerator.

3) Power input voltage range H/M/L setting: long press the Setting button for 3s, then release the button, the H/M/L letters begin to flash, and then short press the Setting button for 1s to switch between H/M/L Voltage gear.

4) Celsius or Fahrenheit display switching: Press and hold the Setting button for 3s, then release the button, the °C/°F start to flash, and then short press “+” to switch the °C/°F temperature unit.

5) Cooling mode switching: Long press the Setting button for 3s, then release the button, MAX/ECO will start flashing, and then short press “+” to switch the MAX/ECO cooling mode.

C. “+”/UP button, set parameter +1 or function selection switching.

D. “-”/Down button, set parameter-1 or function selection switching.

E. After powering on and starting the device, the display screen will stay on at all times. Should the display panel not be used for 5 minutes, the accidental touch lock feature will be activated, indicated by a specific icon. To unlock it, simply press any function key.

# 5 Operation

## 5.1 Before initial use



### NOTE

Before starting your new cooler for the first time, you should clean it inside and outside with a damp cloth for hygienic reasons (please also refer to the chapter “Cleaning and maintenance”).

## 5.2 Energy saving tips

- Choose a well ventilated location which is protected from direct sunlight.
- Allow warm food to cool down first before placing it in the cooling device to keep cool.
- Do not open the cooling device more often than necessary.
- Do not leave the cooling device open for longer than necessary.
- Defrost the cooler once a layer of ice forms.
- Avoid unnecessarily low temperatures.

## 5.3 Connecting the cooler



### NOTICE! Danger of damage!

- Disconnect the cooler and other consumer units from the battery before you connect the battery to a quick charging device.
- Overvoltage can damage the electronics of the device.
- Only plug front or rear DC plug separately, never plug front and rear DC plugs at the same time.

## Connecting to AC mains (e.g. in the home or office)



### DANGER! Danger of electrocution!

- Never handle plugs and switches with wet hands or if you are standing on a wet surface.
- If you are operating your cooler on board a boat with an AC mains connection, you must install a residual current circuit breaker between the AC mains and the cooler. Seek advice from a trained technician.

## 5.4 Using the cooler



### NOTICE! Danger of overheating!

Ensure at all times that there is sufficient ventilation so that the heat that generated during operation can dissipate. Ensure that the ventilation slots are not covered. Make sure that the device is sufficiently far away from walls and other objects so that the air can circulate.



### NOTE

When operating with the battery, the display switches off automatically if the battery voltage is low.

## 5.5 Setting the Temperature



### NOTICE!

The temperature of each compartment can be set to -22 °C.  
The manufacturer however recommends a cooling temperature of -15°C to -18°C for normal usage and optimum energy consumption.



### NOTICE!

Be sure to set the temperature as you expect for the item that needs to be refrigerated to avoid too low a temperature on the item to damage.

## 5.6 Using the Battery Monitor

The device is equipped with a multi-level battery monitor that protects your vehicle battery against excessive discharging when the device is connected to the on-board DC supply.

If the cooler is operated when the vehicle ignition is switched off, the cooler switches off automatically as soon as the supply voltage falls below a set level. The cooler will switch back on once the battery has been recharged to the restart voltage level.



### NOTICE! Danger of damage!

When the battery connected to the product is low in power, the product will stop working due to the battery protection function. In order to avoid frequent start-up and shutdown of the product, please charge the battery in time.  
Avoid starting repeatedly or operating current consumers without longer charging phases. Ensure that the battery is recharged.



### NOTE

When the cooler is supplied by the starter battery, select the battery monitor mode "HIGH". If the cooler is connected to a supply battery, the battery monitor mode "LOW" will suffice.

## 5.7 Downloading Bluetooth APP

The cooler can be controlled via Bluetooth using an APP that you can install on a compatible device, to monitor and control products within a certain distance.  
(at 4.2 Button Setting B 2)



Scan QR code to  
download APP

## 5.8 Setting the Bluetooth and Connecting to the Car Refrigerator APP



### NOTE

The pairing must be done in the Car Refrigerator APP, not in the device settings. Bluetooth connection does not require a password.

## 5.9 USB Port for Power Supply

The USB port allows you to charge small devices like mobile phones and mp3-players.



### NOTE

Ensure that any small device connected to the USB port is compatible with 5V/2000mA operation.

## 5.10 Defrosting the Cooler

Humidity can form frost in the interior of the cooling device or on the evaporators.



### WARNING!

This reduces the cooling capacity. Defrost the device in good time to avoid this.

To defrost the cooler, proceed as follows:

- Take out the contents of the cooling device.
- If necessary, place them in another cooling device to keep them cool.
- Switch off the device.
- Leave the lid open.
- Wipe off the defrosted water.

## 5.11 Replace DC Fuse

**Update the replacement process:**

- Remove the refrigerator net cover with a screwdriver
- Locate the DC fuse holder and pry open the fuse holder
- Pull out the faulty blade fuse
- Insert a new fuse with the same type and parameters
- Restore the fuse holder and refrigerator net cover

## 5.12 Replacing the Fuse of the DC Plug

- Replace the faulty fuse with a new fuse of the same model and rating.

## 5.13 Defrosting the Cooler



### NOTICE! Danger of damage!

The light PCB can only be replaced by the manufacturer, authorised repair center or similar qualified technician to avoid danger.

## 6 Cleaning and Maintenance



**NOTICE! Risk of damage**

- Never clean the cooler under running water or in dish water.
- Do not use abrasive cleaning agents or hard objects during cleaning as these can damage the cooler.

Occasionally clean the device interior and exterior with a damp cloth.

During the use of the refrigerator, condensation water will appear at the door seal. This is a normal phenomenon and can be cleaned with a damp cloth.

Make sure that the air inlet and outlet vents on the device are free of any dust and dirt, so that heat can be released and the device is not damaged.

# 7 Troubleshooting

FAULT	POSSIBLE CAUSE	SUGGESTED REMEDY
This device does not function (DC Mode, the ignition is on).	No voltage was detected in the DC power outlet	In most vehicles the ignition must be turned on before power will be supplied to the DC power outlet.
	The DC Socket is dirty, resulting in poor electrical contact.	If the plug of this product becomes very hot on the DC Socket of the vehicle, try to clean the DC Socket or check if the plug is assembled correctly.
	The fuse of the DC power cord plug has blown .	Replace the device fuse
	The car's fuse has blown .	Replace the vehicle's DC socket fuse. Please refer to your vehicle operating manual .
This device does not function (AC mode), only use the power adapter to convert DC Voltage	No voltage is detected in the AC power outlet.	Try to use another socket.
	Internal failure of this product.	It can only be repaired by an authorised repair center.
Don't use the application (APP)	Bluetooth is not connected.	Connect to Bluetooth, see the chapter "Set up Bluetooth and connect to the app"
The display shows reminder messages or warning codes .		See the tables on following pages.

## Remind Message

FAULT	DESCRIPTION	POSSIBLE CAUSE	SUGGESTED REMEDY
The inner light flashes	Open the door for more than 3 minutes	The door is not closed tightly, or you forget to close the door.	Close the cover
	Others		Inspection by authorised repair center
F1	NTC Sensor open circuit or short circuit	Loose lines or poor welding	Shut down the device for at least 1 minute and then restart it. If the problem persists, you need an authorised service center.
F2 reminder-low voltage		Insufficient power supply voltage	Check the voltage drop from the power supply to the outlet of this product, and increase the voltage if necessary.
	Due to the low DC voltage, the equipment has stopped working	Battery voltage is too low	Test the battery and charge as needed
		The battery H/M/L protection function is set too high	Choose a lower battery and charge as needed
	Because the DC Voltage is too high (greater than 31.5v), the device is protected against power failure .	DC Power supply voltage parameters to not match	Choose a lower battery protection gear
		Abnormal power supply	Check the DC Power supply repair or replace the power supply if necessary
	Others	Authorised maintenance center inspection	

## Remind Message

WARNING CODE	MALFUNCTION	POSSIBLE CAUSE	SUGGESTED REMEDY
F3	Fan over current	The fan does not work or works abnormally	Turn off the device for at least 5 minutes, then restart it. If the problem persists, you need to change fan or contact customer service
F4	Compressor start failure	The ambient temperature is too high, the internal pipeline is highest pressure to blocked or the compressor operates abnormally	Reduce the working environment temperature of the refrigerator, turn off the equipment for at least 5 minutes, and then restart it, and check the fan does not work abnormally. If the problem persists, you need to authorise a service center to check it
F5	Compressor speed is too low	The ambient temperature is too high, the internal pipeline is highest pressure or the compressor operates abnormally	Reduce the working environment temperature of the refrigerator, turn off the equipment for at least 30 minutes, and then restart it, and check the fan does not work abnormally. If the problem persists, you need to authorise a service center to check it
F6	Controller over temperature	Ring temperature too high	When restarting, turn off the device for at least 30 minutes, or move to a cooler location
		Blocked vents or insufficient clearance around	Clear the vents and leave enough clearance with the surroundings
		The fan does not work or works abnormally	Check the fan and process according as F3
		Internal fault	Authorise repair center inspection

## 8 Guarantee

Guaranteed for 12 months repair or replace if the product is defective, please contact your place of purchase or closest Hulk4X4 distributor. For more information go to [hulk4x4.com.au](http://hulk4x4.com.au) or [hulk4x4.co.nz](http://hulk4x4.co.nz). For repair and warranty processing, please include the following documents when you send in the device:

- A copy of the receipt with purchasing date
- A reason for the claim or description of the fault

## 9 Disposal

Place the packaging material in the appropriate recycling waste bins wherever possible.



**If you wish to finally dispose of the product, ask your local recycling centre or specialist dealer for details about how to do this in accordance with the applicable disposal regulations.**



**WARNING! Risk of Children's playing**  
**Before disposing of the old product:**

- Remove the cover
- Put the basket inside the cooler to prevent children from climbing.

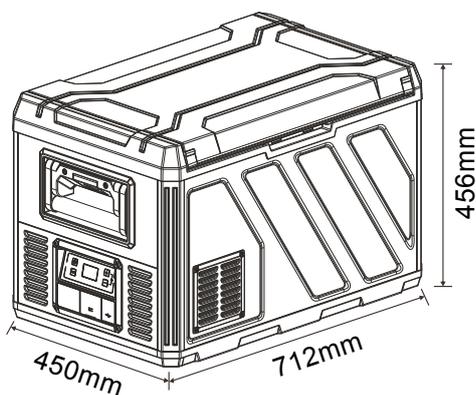
# 10 Technical data

ITEM	SPECIFICATIONS
Model	E-ICE-50
Rated operating current (DC12/24V)	6.5/3.0A
Rated operating power (AC100~240V)	55W
Working ambient temperature	+ 16°C- + 43°C
Temperature setting range	+ 20°C- -22°C
USB output	5V/2A
Bluetooth Response Time	Less than 5 seconds
Bluetooth effective distance	Within 15 meters

BATTERY PROTECTION VOLTAGE GEAR PARAMETER TABLE				
Gear setting	DC12V		DC24V	
	Start-up Voltage	Shut-down Voltage	Start-up Voltage	Shut-down Voltage
H	12.6±0.3	11.8±0.3	26.2±0.3	24.6±0.3
M	12.2±0.3	11.4±0.3	25.3±0.3	24.1±0.3
L	11.4±0.3	10.1±0.3	23.0±0.3	21.5±0.3

**Notice:**

- 1.When the input voltage is lower than the shut-down voltage, F2 is displayed.
- 2.When the input voltage is higher than DC17.0V or DC31.5V, F2 is displayed.



MODEL	E-ICE-50
Size (mm)	712 x 450 x 456
Capacity(L)	49.8
N.W.(kg)	22

The refrigerant of this product is R134a

Restriction of Hazardous Substances Directive (RoHS)

In order to meet the laws, regulations and other requirements related to the restriction of hazardous substances in electrical and electronic products of the People's Republic of China.

Our company classifies hazardous substances in this product according to parts, and declares as follows:

### BOX THE NAME AND CONTENT OF HAZARDOUS SUBSTANCES IN THE PRODUCT

Parts	Harmful Substance					
	(Pb)	(Hg)	(Cd)	(Cr(VI))	(PBB)	(PBDE)
Box and its components	0	0	0	0	0	0
Door body and its components	0	0	0	0	0	0
Insulation Materials	0	0	0	0	0	0
Compressor	0	0	0	0	0	0
Compressor controller	X	0	0	0	0	0
Refrigeration components	0	0	0	0	0	0
Refrigerant	0	0	0	0	0	0
Electrical components	0	0	0	0	0	0
Power cord and connection line	0	0	0	0	0	0
Packaging and printing materials	0	0	0	0	0	0

This table is compiled in accordance with the regulations of SJ/T11364.

0: Indicates that the content of the hazardous substance in all homogeneous materials of the part is below the limit requirement specified in GB/T26572.

X: Indicates that the content of the hazardous substance in at least one of the homogeneous materials of the part exceeds the limit requirement of GB/T26572.

\*All parts and their homogeneous materials that contain hazardous substances in the detailed list cannot be replaced by hazardous substances due to the limitation of the industry's technological development level. They comply with the strict requirements of the EU RoHS for the restriction of hazardous substances.

Please feel free to use them.

**Reminder:** In order to protect the environment, after this product or its components are scrapped, as a consumer have the responsibility to separate it from domestic waste and send it to a qualified recycling site, which will be classified and disassembled in accordance with relevant national regulations of recycling, etc.

For detailed information about the recycling of this product, please consult your local government, waste disposal agency, etc.



Electronic and electrical products sold within the territory of the People's Republic of China must be marked with this mark, and the number in the mark represents the environmental protection use period of the product under normal use.

5005.000.0133

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