

# LIEBHERR

# Contents

1	Appliance at a glance	3
1.1	Scope of supply	3
1.2	Overview of appliance and equipment	3
1.3	Special features	3
1.4	Range of use of appliance	4
1.5	Appliance noise emissions	4
1.6	Compliance	4
1.7	SVHC substances according to REACH regulation.	4
2	General safety instructions	4
3	Putting into operation	6
3.1	Installation conditions	6
3.2	Appliance dimensions	7
3.3	Transporting appliance	7
3.4	Unpacking appliance	7
3.5 3.6	Removing transport lock	7
3.0 3.7	Installing door handle Mounting anti-tipping device	7 7
3.8	Installing appliance	8
3.9	Setting up the appliance so it is level	8
3.10	Installing multiple appliances	9
3.11	After installation	9
3.12	Disposing of packaging	9
3.13	Reversing the door opening direction	9
3.14	Aligning the door	16
3.15	Connecting appliance	17
3.16	Switching on appliance (first use)	17
4	Storage	18
4.1	Information regarding storage	18
5	Controls	18
5.1	Control and display elements	18
5.1.1	Status display	.18
5.1.2 5.1.3	Display symbols Acoustic signals	. 18
5.2	Navigation	. 19
5.2.1	Navigation with the touch display	
5.2.2	Settings menu	. 19
5.2.3	Customer menu	
5.2.4	General rules	
5.3	Functions	
5.3.1	Overview of functions	
5.3.2	Switching appliance on and off	
5.3.3	Temperature	21
5.3.4	Temperature recording	. 22
5.3.5	Lighting	
5.3.6 5.3.7	Door lock SmartLock	
5.3.8	Sinarceck Settings menu access protection	
5.3.9	Access codes	
5.3.10	Remote control	
5.3.11	Maintenance interval reminder	
5.3.12	Language	
5.3.13	Date and time	.30
5.3.14	Temperature unit	. 30
5.3.15	Display brightness	. 30
5.3.16	Alarm Sound	
5.3.17	Key Sound	31
5.3.18	WiFi connection	
5.3.19	LAN connection	
5.3.20	Info	
5.3.21 5.3.22	Operating hours Software	
5.3.22	Defrosting	
5.3.23	Data download / Datalogging	. 34
5.3.24	Sensor calibration	
5.3.26	Temperature alarm	
5.3.27	Door alarm	
5.3.28	Light alarm	
5.3.29	Alarm simulation	
5.5.27		

5.3.31 5.3.32 5.3.33 5.4 5.4.1 5.4.2	Alarm relay DemoMode Factory reset Message Warnings Reminders	.38 .39 .39 .39
<b>6</b> 6.1 6.2 6.3 6.4 6.5	FeaturesSafety lock Remote controlSensorsSensor infoInterfaces	<b>41</b> 42 42 42 42 43
<b>7</b> 7.1 7.2 7.3 7.4 7.5	MaintenanceMaintenance scheduleDefrosting applianceCleaning the applianceReplacing appliance batteryReplacing the remote control batteries	<b>43</b> 43 45 45 46 46
<b>8</b> 8.1 8.2 8.3 8.4	Customer help Technical specifications Technical fault Customer Service Type plate	<b>47</b> 47 48 48 49
9	Shutting down	49
<b>10</b> 10.1 10.2	<b>Disposal</b> Preparing appliance for disposal Disposing of the appliance in an environmentally friendly manner	<b>49</b> 49 49
11	Additional information	50
12	Quick Start Guide for everyday use	51

The manufacturer is continually working on the further development of all types and models. Please be aware that we reserve the right to make changes to the shape, equipment and technology.

Symbol	Explanation
	<b>Read instructions</b> Please read the information in these instruc- tions carefully to understand all of the benefits of your new appliance.
	Full instructions on the internet You can find detailed instructions on the internet using the QR code on the front of these instruction or by entering the service number at home.liebherr.com/fridge- manuals. The service number can be found on the serial tag:
	Check appliance Check all parts for transport damage. If you have any complaints, please contact your agent or customer service.

# Appliance at a glance

<b>Differences</b> These instructions apply to a range of models, so differences are possible. Sections that apply to certain models only are marked with an asterisk (*).
Instructions and results Instructions are marked with a ▶. Results are marked with a ▷.
Videos Videos about the appliances are available on the YouTube channels of Liebherr-Hausgeräte.

- HMFvh 4001
- HMFvh 4011
- HMFvh 5501
- HMFvh 5511

# 1 Appliance at a glance

# **1.1** Scope of supply

Check all parts for transport damage. If you have any complaints, please contact your dealer or Customer Service. (see 8.3 Customer Service)

The delivery comprises the following parts:

- Free-standing appliance
- Equipment \*
- Installation materials \*
- Operating instructions
- Service brochure
- Quality certificate \*
- Mains cable
- Remote control
- Emergency unlocking key
- Handle incl. screws and Torx wrench
- Wall fastening kit

# **1.2** Overview of appliance and equipment

HMFvh 4001	
HMFvh 5501	

HMFvh 4011 HMFvh 5511

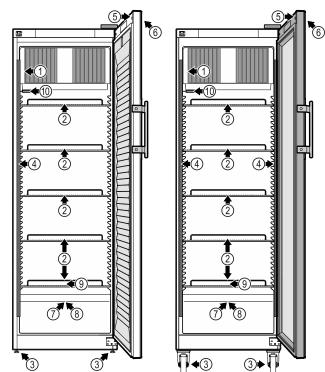


Fig. 1 Example illustration of the front

#### Equipment

- (1) Type plate
- (6) Control elements and temperature display
  - (7) Sensor feedthrough
- (8) Safety thermostat sensor
- (3) Adjusting feet/castors
   (4) Interior lighting \*
- (9) Defrost drain water (10) P sensor
- (5) Lock

(2) Grid shelves

Fig. 2 Example illustration of the rear

## Equipment

- (1) LAN/WiFi interface\*(2) Potential-free alarm
- (4) Connection for P sensor(5) Carrying aid
- output
- (3) USB interface

# 1.3 Special features

#### Note

Accessories are available from Customer Service (see 8.3 Customer Service) and the Liebherr-Hausgeräte store at home.liebherr.com/shop/de/deu/zubehor.html.

## SmartModule

The appliance is fitted with a SmartModule.

This is a WiFi and LAN interface for the connection between the appliance and an external documentation and alarm system such as Liebherr SmartMonitoring.

# **Retrofitting drawers**

Temperature qualification is required when retrofitting drawer systems in Liebherr refrigerators/freezers where these are used for temperature-sensitive materials such as chilled drugs and refrigerated products which are subject to specific standards requirements. Retrofitting drawers in Liebherr refrigerators/freezers can result in the goods stored becoming spoiled or damaged. The retrofitting must therefore be completed exclusively by authorised service providers from the manufacturer of the refrigerator/freezer.

# 1.4 Range of use of appliance

# Intended use

This medical refrigerator is suitable for professional storage of products at a temperature of 5 °C.

Typical products to be stored include drugs which require refrigeration, medicines or other pharmaceutical products in a temperature range from 2 °C to 8 °C.

The appliance meets the requirements of DIN 13277 Refrigerators and freezers for laboratory and medical applications.

It is necessary to use an independent alarm system with permanent monitoring if storing valuable or temperature-sensitive substances or products. This alarm system must be designed in such a way that every alarm state is immediately registered by a competent person who then takes appropriate measures.

# Foreseeable incorrect use

Do not use the appliance for the following applications:

- Storage and refrigeration of:
  - Chemically unstable, flammable or corrosive substances
  - Blood, plasma or other body fluids for the purpose of infusion, application or introduction in the human body.
- Use in potentially explosive atmospheres.
- Use outdoors or in areas exposed to dampness and splashing water.

Improper use of the appliances will result in goods stored being damaged or spoiled.

# **Climate classes**

The applicable climate class for your appliance is printed on the type plate.

nnDann an Dann	x	Jeity () Mitgel	AP-Tpe AP-Tpe	Bruteshalt / Eren Vetame Brut / Cap	n Caperity social Insta			Nomp./Ci	aalCiinate aae de tomp	
International In	144 /K 25 /A 26 /A	(0) (F) (0)	(KE (CE (CA (RO	(KALT (CHLL (CHLL (CHLL	R60	0a: A	9 0	v	Hz	
•					Seta	Nr.	9	9.9	99.9	99.9

Fig. 3 Type plate

(X) The climate class states the ambient conditions in which the appliance can be operated safely.

- 1		max. room temperature	max. rel humidity	•
	7	35 °C	75%	

# Note

The minimum permitted room temperature at the setup location is 10 °C.

Slight condensation may form at the limit conditions on the glass door and on the side walls.

# 1.5 Appliance noise emissions

The A-weighted emission sound pressure level during operation of the appliance is under 70 dB(A) (sound power rel. 1 pW).

# 1.6 Compliance

The refrigerant circuit has been tested for leaks.

This appliance complies with the applicable safety regulations and with EU directives 2006/42/EC, 2014/30/EU, 2009/125/EC and 2011/65/EU.

The installed wireless module complies with directive 2014/53/EU. Information on the wireless model (see 8.1 Technical specifications).

The full text of the EU Declaration of Conformity is available on the following website: www.liebherr.com

# **1.7 SVHC substances according to REACH regulation**

You can check whether your appliance contains SVHC substances according to REACH regulation at the following link: home.liebherr.com/de/deu/de/liebherr-erleben/nach-haltigkeit/umwelt/scip/scip.html

# 2 General safety instructions

Please keep these operating instructions in a safe place so you can refer back to them at any time.

If you pass the appliance on, please hand these operating instructions to the next user.

Read these operating instructions carefully before use to ensure safe and correct use of the appliance. Follow the instructions, safety instructions and warning messages included at all times. They are important for ensuring you can operate and install the appliance safely and without any problems.

# Danger for the user:

- This appliance may only be used by specialist and laboratory personnel who have been trained for this purpose and are familiar with all safety measures pertaining to laboratory work. Children and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge must not commission or operate this appliance.
- The socket must be easily accessible so that the appliance can be disconnected quickly from the electricity supply in an emergency. It must not be located in the area behind the appliance.
- When disconnecting the appliance from the supply, always take hold of the plug. Do not pull the cable.
- In the event of a fault pull out the mains plug or deactivate the fuse.
- **WARNING:** Do not damage the mains power cable. Do not operate the appliance with a defective mains power cable.
- WARNING: Multiple sockets/distributors and other electronic equipment (such as halogen transformers) must not be placed or operated at the rear of the appliance.
- **WARNING:** Keep ventilation openings, in the appliance enclosure or in the built-in structure, clear of obstruction.
- Only customer service or other specially trained staff may repair or perform other operations on the appliance.
- Only assemble, connect and dispose of the appliance according to the instructions.

# Fire hazard

- The coolant used (information on the model plate) is ecofriendly but also flammable Any leaking coolant may ignite.
  - **WARNING:** Do not damage refrigeration circuit.
  - Do not handle ignition sources inside the appliance.
  - WARNING: Do not use electrical appliances in the fridge compartment which do not comply with the design recommended by the manufacturer.
  - If the refrigerant leaks: remove any naked flames or ignition sources from the vicinity of the leakage point. Properly air the room. Inform customer services.

- Do not operate the appliance close to explosive gases.
- Do not store or use petrol or other flammable gases and liquids close to the appliance.
- Do not store any explosive substances, such as aerosol containers with flammable propellant gas, in the appliance. To identify these spray cans, look for the list of contents printed on the can, or a flame symbol. Gases possibly escaping may ignite due to electrical components.
- Keep burning candles, lamps and other items with naked flames away from the appliance so that they do not set the appliance on fire.
- Alcoholic liquids or other containers with alcohol inside must only be stored tightly sealed. Any alcohol that leaks out may be ignited by electrical components.

# Danger of tipping and falling:

- **WARNING**: In order to prevent danger due to an unstable appliance, it must be fixed in accordance with the instructions.
- Do not misuse the plinth, drawers, doors etc. as a step or for support.

# Danger of frostbite, numbness and pain:

 Avoid prolonged skin contact with cold surfaces or refrigerated/frozen goods or take protective measures, e.g. wear gloves.

# Danger of injury and damage:

- **WARNING:** Do not use mechanical equipment or other methods to speed up the defrosting process other than those recommended by the manufacturer.
- **WARNING:** Risk of injury due to electric shock! There are live electrical parts under the cover.

Only have the LED interior lighting replaced or repaired by customer service or other suitably trained professionals.

**NOTICE:** Appliance must only be used using original manufacturer accessories or using accessories from other providers approved by the manufacturer. The user bears the risk of using accessories which are not approved.

# **Risk of crushing**

Do not hold the hinge when opening and closing the door. Fingers may get caught.

# Specialist personnel qualifications:

The appliance may only be installed, tested, maintained, and commissioned by

specialist personnel who are familiar with the installation, commissioning, and operation of the appliance.

Specialist personnel are persons who, on account of their specialist training, knowledge and experience as well as their knowledge of the relevant standards, are able to assess and perform the work assigned to them and identify potential hazards. They must have training, instruction, and authorisation to work on the appliance.

# Symbols on the appliance:



This symbol may be located on the compressor. It relates to the oil in the compressor and makes reference to the risk that:**Swallowing or inhaling can be fatal.** This advice is only relevant to recycling. There is no danger in normal operation.



**WARNING**: Danger of fire / flammable materials. This symbol is located on the compressor and indicates the danger of flammable materials. Do not remove the sticker.

The symbol is located on the back of the appliance near the alarm relay and indicates the following danger: **Electric shock!** Even if an appliance is disconnected from the mains there may still be extraneous voltage. Do not remove sticker.



This or a similar sticker may be located on the rear of the appliance. This sticker indicates that there are vacuum insulation panels (VIP) or perlite panels in the door and/or housing. This advice is only relevant to recycling. Do not remove the sticker.



This or a similar sticker may be located on the rear of the appliance. It refers to the Li-ion self-charging battery installed. This advice is only relevant to recycling. Do not remove sticker.

# Please note the warning messages and other specific advice in the other chapters:

	DANGER	Indicates an immediately hazardous situation which will lead to death or serious injuries if it is not avoided.
$\triangle$	WARNING	Indicates a hazardous situation which will lead to death or serious injuries if it is not avoided.
	CAUTION	Indicates a hazardous situation which will lead to minor or moderate injuries if it is not avoided.
	NOTICE	Indicates a hazardous situation which may lead to damage to prop- erty if it is not avoided.

Note Indicates useful instructions and tips.

# **3** Putting into operation

# 3.1 Installation conditions



Fire hazard due to dampness!

If live parts or the mains lead become damp this may cause short circuits.

The appliance is designed for use in enclosed areas. Do not operate the appliance outdoors or in areas where it is exposed to splash water or damp conditions.

# 3.1.1 Installation location



Leaking coolant and oil! Fire. The coolant contained in the appliance is eco-friendly, but also flammable. The oil contained in the appliance is flammable. Escaping coolant and oil can ignite if the concentration is high enough and in contact with an external heat source.

- Do not damage the pipelines of the coolant circuit and the compressor.
- Do not install appliance in direct sunlight, next to an oven, radiator or similar.
- The best place for installation is a dry and well ventilated room.
- If the appliance is installed in a very humid environment, condensation can form on the outside of the appliance. Always ensure good airflow and ventilation in the installation location.
- The more refrigerant there is in the appliance, the larger the space it is installed in must be. If the space is too small, any leak may create a flammable mixture of gas and air. For every 8 g of refrigerant, the installation space must be at least 1 m<sup>3</sup>. Information regarding the refrigerant can be found on the type plate inside the appliance.
- The floor of the location must be horizontal and even.
- The installation location must be able to withstand the weight of the appliance plus weight when stocked to maximum level. (see 8.1 Technical specifications)

# 3.1.2 Electrical connection

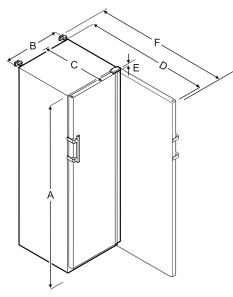
# 

Danger of fire due to incorrect positioning!

If the mains cable or plug touches the back of the appliance, the vibration can damage the mains cable or the plug resulting in a short circuit.

- Make sure the mains cable is not trapped under the appliance when you position the appliance.
- Stand the appliance so that it is not touched by connectors or main cables.
- Do not connect any appliances to sockets in the area of the back of the appliance.
- Do not place and operate multi-sockets/power distributors and other electronic devices (such as halogen transformers) at the back of the appliances.

# 3.2 Appliance dimensions



	HMFvh 4001/4011	HMFvh 5501/5511
A	1884 mm	1793 mm
В	597 mm	747 mm
С	664 mm	779 mm
D	1203 mm	1468 mm
Ε	23 mm	23 mm
F	1241 mm	1506 mm

- A = appliance height including feet/castors
- **B** = appliance width without handle [handle depth = 45 mm]
- **C** = appliance depth without handle [handle depth = 45 mm]
- **D** = appliance depth with door open
- E = hinge height

 $\mathbf{F}$  = appliance depth with protruding handle and anti-tipping device

# 3.3 Transporting appliance

# WARNING

Risk of injury due to broken glass!\*

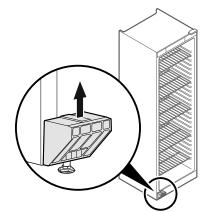
When transporting at an altitude of more than 1500 m, the glass panes of the door may break. This can result in sharpedged fragments, which can cause serious injuries.

- Take appropriate protective action.
- On initial setup: Transport the appliance in its packaging. When transporting after initial setup (e.g. relocation): ►
- Transport the appliance unloaded.
- Transport the appliance upright.
- ▶ Use two people to transport the appliance.

# 3.4 Unpacking appliance

- Check the appliance and the packaging for damage during transport. Contact the supplier immediately if you suspect any damage. Do not connect appliance to the power supply.
- Remove all materials from the back or the side walls of the appliance that may prevent proper installation or prevent air flow and ventilation.

# 3.5 Removing transport lock



- Remove transport lock in upwards direction.
- $\triangleright$  Base holder remains on the appliance.

# 3.6 Installing door handle

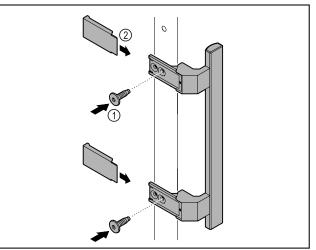


Fig. 5

- Attach handle from accessory kit to the door using the screws Fig. 5 (1) supplied.
- ▶ Put on covers Fig. 5 (2).

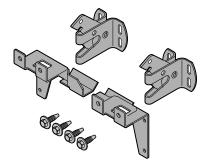
# 3.7 Mounting anti-tipping device

# Tools



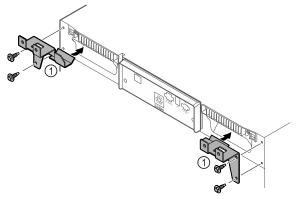
Fia. 6

Prevent appliance from tipping over.



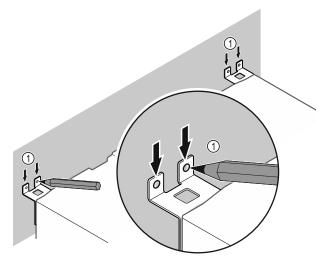
# Fig. 7

The anti-tipping device, consisting of two retaining parts, two retaining hooks and four screws (4 x 14), is included with the appliance.



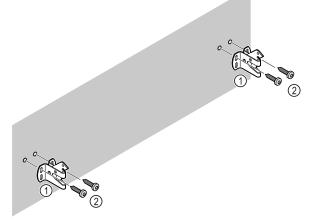
## Fig. 8

- Mount retaining parts Fig. 8 (1) on the appliance using the screws supplied.
- Push appliance with retaining parts mounted against the wall.



## Fig. 9

- ▶ Make markings on the wall *Fig. 9 (1)*.
- Remove appliance.



## Fig. 10

Use fixing material (e.g. dowels) which is appropriate for the nature of the wall (wood, concrete) and sufficient attachment points.

Attach retaining hooks.

# 3.8 Installing appliance

# 

Risk of injury and damage. ► Use 2 people to install appliance.

# 

Risk of injury and damage.

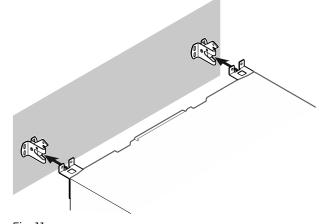
The door can knock against the wall and become damaged as a result. In the case of glass doors, the damaged glass can cause injuries.

- Protect the door from knocking against the wall. Attach door stopper, e.g. felt stopper, to the wall.
- Connect all necessary components (e.g. mains cable) to the back of the appliance and route to the side.

# Note

Cables can be damaged.

Do not jam the cable when pushing the appliance back.



# Fig. 11

- Slide appliance up against the wall so that the retaining parts latch into the securing hooks.
- $\triangleright$  The appliance is now secured against tipping.
- $\triangleright$  It can be released by folding back the securing hooks.

# **3.9** Setting up the appliance so it is level

## NOTICE

Appliance body is deformed and door does not close.

- Align appliance horizontally and vertically.
- Compensate for uneven floors using adjustable feet.

# 

Incorrect height adjustment of the adjustable foot!
Can cause severe or even fatal injury. Incorrect height adjustment can cause the bottom part of the adjustable foot to come loose and the appliance to tip over.
▶ Do not unscrew the adjustable foot too far.



# Fig. 12 \*

Raising appliance:

# Turn adjustable foot clockwise.

- Lowering appliance:
- Turn adjustable foot anticlockwise.

# 3.10 Installing multiple appliances

# NOTICE

Risk of damage due to condensation between the side walls.

- Do not install the appliance directly next to another fridge.
- Install appliances with a space 3 cm between appliances.
   Only install multiple appliances up to temperatures of
- 35 °C and 65% humidity next to one another.
- ► At higher levels of humidity, increase space between appliances.

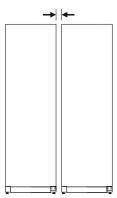


Fig. 13 Side-by-side installation

## Note

A side-by-side kit is available as an accessory via Liebherr Customer Service. (see 8.3 Customer Service)

# 3.11 After installation

- Take off the protective film from the exterior of the appliance.
- Clean appliance. (see 7.3 Cleaning the appliance)
- If necessary: Disinfect the appliance.
- Keep the invoice so you have the appliance and dealer information available if needed.

# 3.12 Disposing of packaging



Danger of suffocation due to packing material and plastic film!

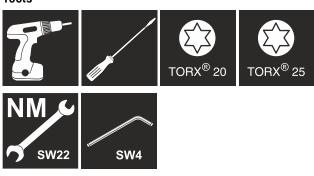
Do not allow children to play with packing material.

The packaging is made of recyclable materials:

- corrugated board/cardboard
- expanded polystyrene parts
- polythene bags and sheets
- polypropylene straps
- nailed wooden frame with polyethylene panel\*
- ► Take the packaging material to an official collecting point.

# 3.13 Reversing the door opening direction

Tools



# 

Risk of injury if the door is not reversed correctly! ► The door may only be reversed by qualified personnel.



Risk of injury and material damage due to heavy door!

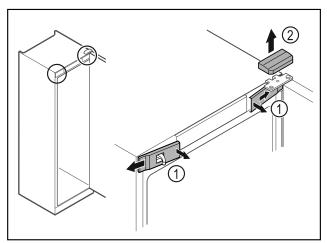
- Only perform the conversion if you can carry a weight of 25 kg.
- Always have someone help you carry out the conversion.

# NOTICE

Live parts!

Damage to electrical components.

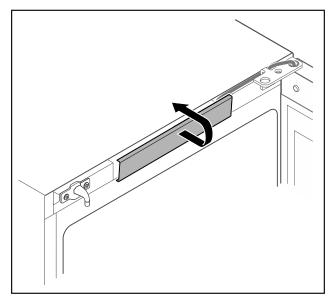
- Disconnect the power plug before reversing the door.
- Open the door.



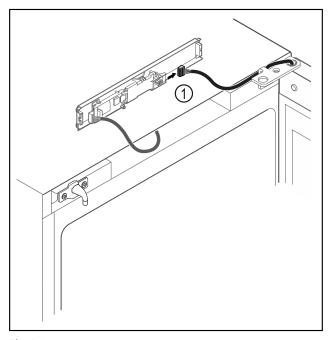
## Fig. 14

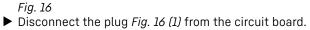
- ▶ Unlatch the front covers *Fig.* 14 (1) on the inside and remove them sideways.
- Lift off the upper cover Fig. 14 (2).





*Fig. 15*Unlatch the middle cover and remove it.





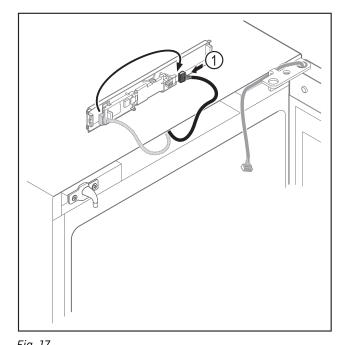
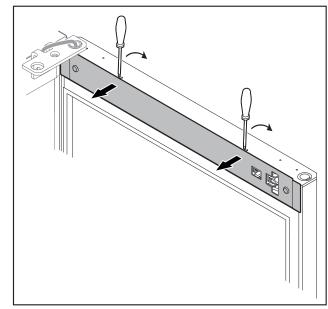
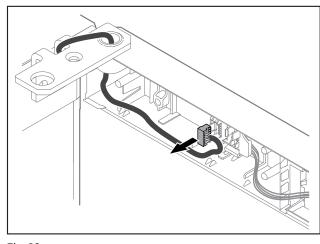


Fig. 17Connect the plug Fig. 17 (1) to the circuit board.





Unlatch the cover with a small screwdriver and take it off.





• Remove the plug from the plug holder.

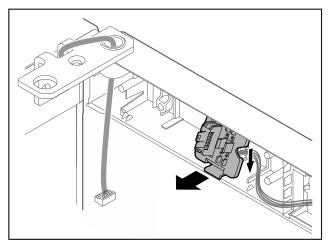


Fig. 20 The installation position of the plug holder can be rotated by 180°.

Disengage the plug holder.

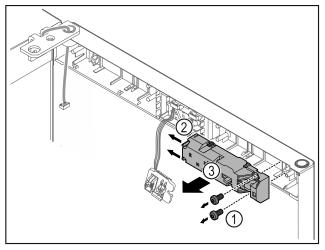


Fig. 21

- Remove the screws Fig. 21 (1).
- Press the latching lugs Fig. 21 (2) to the side and take off the remote lock Fig. 21 (3).

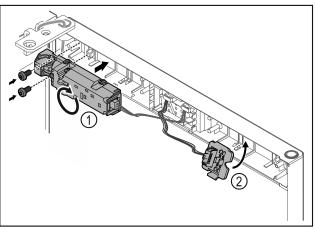


Fig. 22

- ▶ Turn the remote lock *Fig. 22 (1)* by 180° and fasten it on the opposite side.
- Snap in the plug holder *Fig. 22 (2)* on the opposite side.

# NOTICE

- Risk of injury if the door tips out!
- Hold the door.

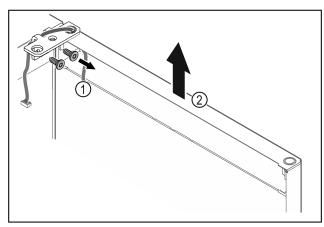


Fig. 23

- Unscrew the hinge Fig. 23 (1).
- ▶ Lift the door with the hinge straight up by *Fig. 23 (2)* roughly 200 mm and take it off.
- Carefully place the door on a soft surface.

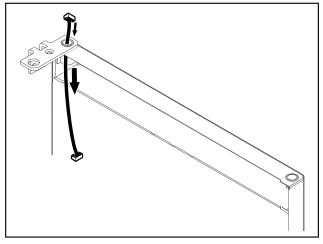
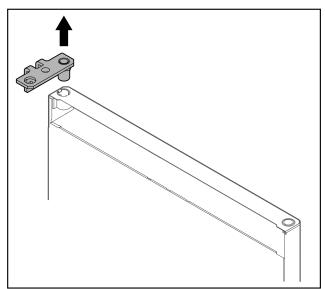
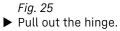
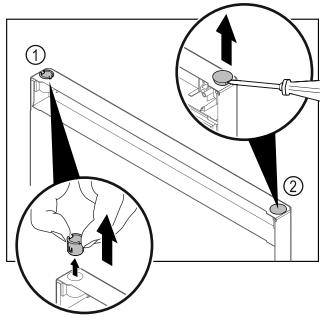


Fig. 24

► Carefully pull out the cable.







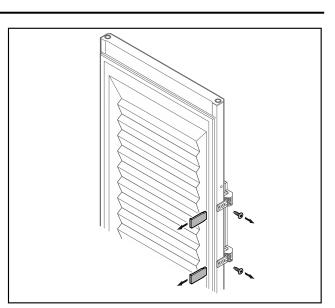
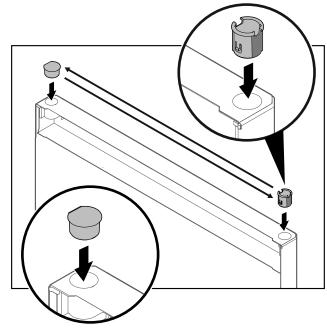
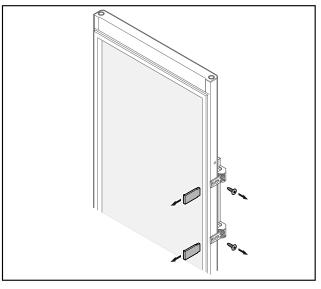


Fig. 28 Insulated door\*

- Fig. 26
  ▶ Pull out the hinge bushing Fig. 26 (1) with your fingers.
  ▶ Carefully lift the cover plug Fig. 26 (2) with a slotted screwdriver and pull it out.



- Fig. 27Insert hinge bushing and cover plug on the opposite side (the flattened sides face outwards).



- Fig. 29 Glass door\*
  ▶ Remove the panels.
  ▶ Unscrew the handle.

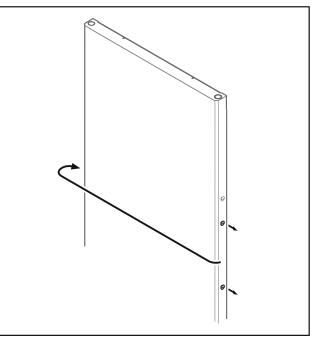


Fig. 30

▶ Put the stopper on the opposite side.

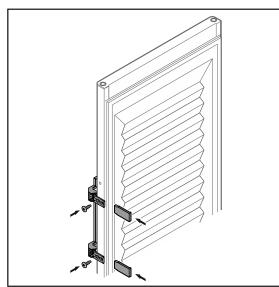


Fig. 31 Insulated door\*

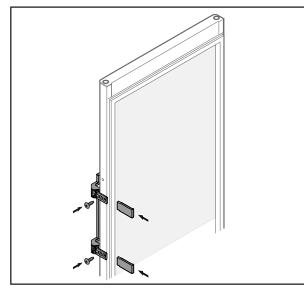
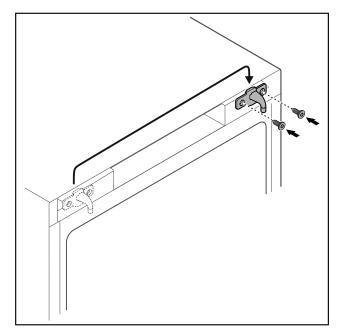


Fig. 32 Glass door\*

Screw the handle onto the opposite side. Attach the panels. ►

►



# Fig. 33

Move the door latch to the opposite side.

# Note

The holes are pre-marked and must be pierced with the self-tapping screws.

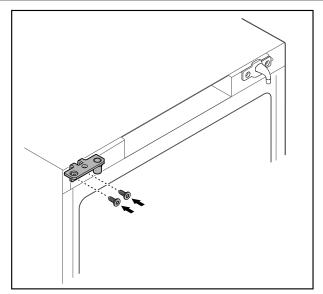


Fig. 34

Move the hinge to the opposite side.



WARNING
Risk of injury and material damage if the door tips out!
Tighten the bearing pins to the specified torque.

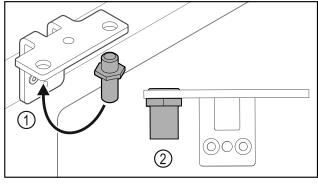


Fig. 35

- Put the pin back into the hinge Fig. 35 (1).
- ▶ Tighten the pin *Fig. 35 (2)* to a torque of 12 Nm.
- Unscrew the hinge again.

## NOTICE

Risk of injury due to tensioned spring!

▶ Do not disassemble the door closing system *Fig. 36* (1).

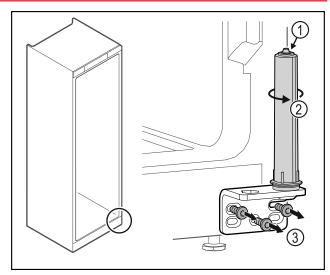


Fig. 36

- ▶ Turn the closing system *Fig. 36 (2)* until it clicks.
- $\triangleright$  The tension of the closing system is released.
- Unscrew the hinge Fig. 36(3).

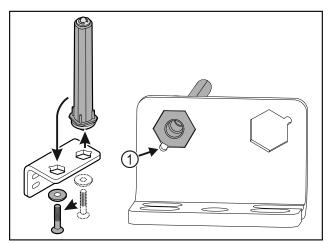


Fig. 37

- Put the door closing system in the hinge.
- Make sure the pin chamfer Fig. 37 (1) faces the round hole when you put it in.

-or-

# Note

Incorrect alignment of the height adjustment washers. Nuts no longer have sufficient hold.

- The washer must lock into the underside of the closing
- system.

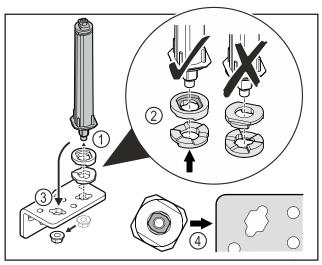
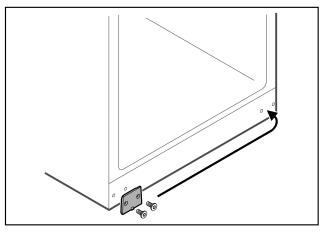


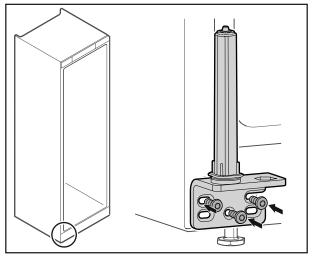
Fig. 38

- Loosen the nut and remove the door closing system Fig. 38 (1).
- ▶ Observe the correct alignment of the height adjustment washers *Fig. 38 (2)*.
- ▶ Put the door closing system in the hinge and fix in place with the nut *Fig. 38 (3)*.
- Observe the correct alignment of the door closing system when doing so Fig. 38 (4).





• Put the cover plate on the opposite side.



#### Fig. 40

Screw the hinge onto the opposite side.

#### Note

Correct alignment and tension are important for the closing system to work properly.

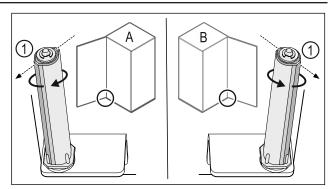
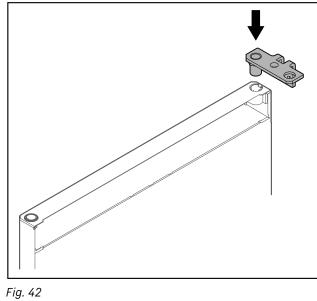
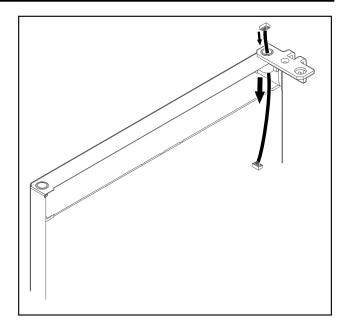


Fig. 41 Left-hinged (A) / Right-hinged (B)

- ▶ Turn the closing system against the resistance until the bar of the closing system *Fig. 41 (1)* points outwards.
- $\triangleright$  The closing system automatically stays in this position.
- $\triangleright$  The closing system is now aligned and tensioned.



Put the hinge into the door.



#### Fig. 43

Carefully push the cable through.

# NOTICE

- Risk of injury if the door tips out!
- Hold the door.

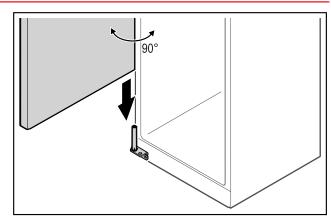


Fig. 44

- Together with a second person, lift the door from the ground.
- Carefully put the door on the closing system with the door opened at a 90° angle.

## NOTICE

Material damage due to incorrect mounting!Do not pinch the cable when mounting the hinge.

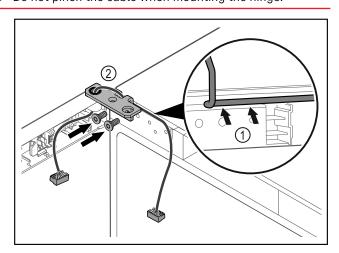


Fig. 45

- ▶ Feed the cable through the recess in the hinge and lay it carefully *Fig. 45 (1)*.
- Screw on the hinge Fig. 45 (2).

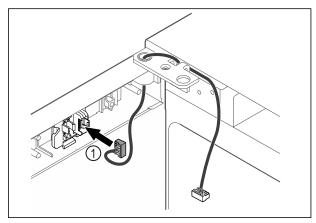


Fig. 46

▶ Put the plug *Fig. 46 (1)* in the plug holder.

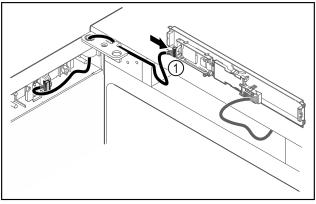
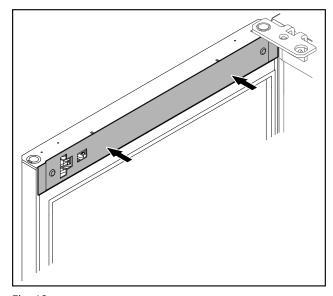
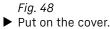
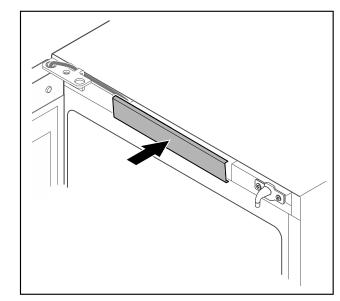


Fig. 47

• Connect the plug *Fig. 47 (1)* to the circuit board.









Snap in the middle cover.

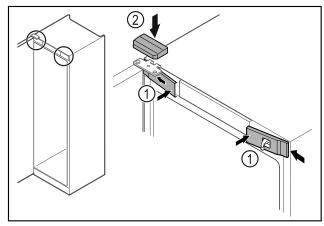


Fig. 50

- Hook in the front covers *Fig. 50 (1)* on the side and snap them into place.
- Snap on the top cover *Fig. 50 (2)* from above.
- Close the door.
- Dash The door has now been reversed.

# 3.14 Aligning the door

If the door is not straight, you can adjust it on the lower hinge.

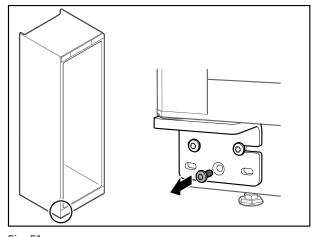


Fig. 51Remove the middle screw on the lower hinge.

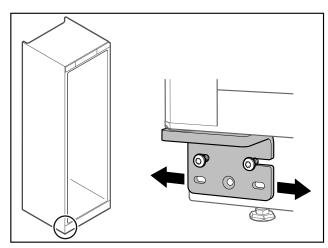


Fig. 52

- Slightly undo both screws and move the door with the hinge to the left or right.
- Fully tighten the screws (the middle screw is no longer needed).
- $\triangleright$  The door is now straight.

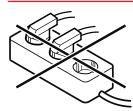
# 3.15 Connecting appliance

# 

Failure to connect properly Fire hazard.

Do not use an extension cable.

Do not use distributor blocks.



## NOTICE

Failure to connect properly

- Damage to the electronics.
- Do not connect the appliance to a stand-alone inverter, e.g. solar power systems and petrol generators.

Note

Only use the supplied mains cable.

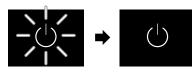
Make sure the following prerequisites are met:

- The appliance is operated using **alternating current** only.
- The permitted voltage and frequency is printed on the type plate. The type plate position can be seen in the appliance overview chapter. (see 1.2 Overview of appliance and equipment)
- The socket is earthed according to the regulations and fused.
- The fuse tripping current is between 10 A and 16 A.
- The socket is easily accessible.
- Check the electrical connection.
- Insert the appliance plug into the back of the appliance. Ensure that they latch into place.
- Connect the mains plug to the power supply.
- $\triangleright$  The display switches to the standby symbol.

# 3.16 Switching on appliance (first use)

Make sure that the following requirements are fulfilled:

- Appliance is installed and connected.
- All adhesive strips, adhesive and protective films and transport locks are removed from inside and outside the appliance.

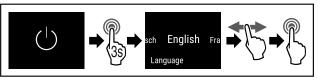


#### Fig. 53 Startup process

The standby symbol flashes until the startup process is complete.

The standby symbol is shown in the display.

If the appliance has been supplied with factory settings, the screen language and the date/time first need to be set when using the appliance for the first time.



## Fig. 54

- Complete steps (see Fig. 54).
- $\triangleright$  Language is set.

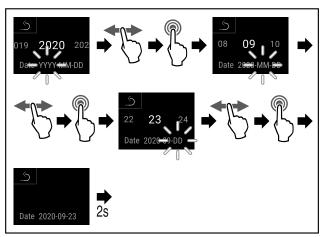


Fig. 55

- Complete steps (see Fig. 55) .
- $\triangleright$  Date is set.

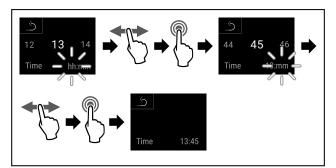


Fig. 56

- Complete steps (see Fig. 56) .
- $\triangleright$  Time is set.



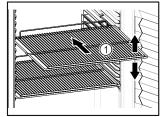
# Storage

Fig. 57 Status display

> The appliance is ready for operation once the temperature appears in the display.

# 4 Storage

# **4.1** Information regarding storage



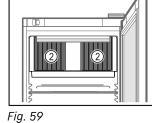


Fig. 58

# When stocking observe the following:

- □ If there are adjustable shelves *Fig. 58 (1)*, position them as required.
- Observe maximum load. (see 8.1 Technical specifications)
- Do not load appliance until storage temperature has been reached (maintain cold chain).
- □ Ventilation slots *Fig. 59 (2)* for recirculation fan in the interior must be kept clear.
- Items for refrigeration must not come into contact with the evaporator on the rear wall.
- Keep liquids in closed containers.
- Leave space when storing items for refrigeration to ensure good air circulation.
- Do not stack refrigerated products above the indicated height.

This is important for free air circulation and even temperature distribution in the interior.

# 5 Controls

# 5.1 Control and display elements

The display provides a quick overview of the current appliance status, the temperature setting, the status of functions and settings as well as alarm and error messages.

It is operated by swiping or pressing the colour touch display directly.

Functions can be activated or deactivated and setting values can be changed.



*Fig. 60 Colour touch display* (1) Status display

# 5.1.1 Status display



# Fig. 61 Status display

(1) Actual temperature

- (2) Alarm status
- (3) Defrosting status(4) Door lock status

The status display is the home display.

It displays the temperature in the centre and three symbols in the lower area. The status display may show a further range of display symbols.

You navigate from the status display to the functions and settings. (see 5.2 Navigation)

# 5.1.2 Display symbols

Display symbols provide information about the status of the appliance.

Symbol	Appliance status
	Standby symbol
	Appliance is switched off.
	Standby symbol (flashing)
	Appliance is starting up.
	Temperature (flashing)
	Target temperature not yet reached. Appliance cooling to temperature set.
5.0	Temperature display
<b>5,0</b> · c	Displays the current inte- rior temperature
	Status display (with white border)
	Appliance is locked.
<sup>©</sup> 5,0 °	D in the display
A *0 T	Appliance is in Demo- Mode.
<u>(</u>	Maintenance display (yellow)
Maintenance	The time interval set has expired.
	Full data memory (yellow)
Min /max. memory	The data memory (999 hours) is full. From now, the oldest data will be overwritten.
A	Full alarm memory (yellow)
Alarm history	The alarm memory is full. Delete individual alarms or entire memory.

Symbol	Appliance status
M	Manual door opening (yellow)
Manually opened	The locked door was opened manually.
	Error symbol (red)
Device failure	Appliance is in error state.
(S)	Back arrow
	Leads to higher-level menu.
	Background (blue)
	Active setting or active function
	Bar (increasing)
	Press for 3 seconds to activate setting.
	Bar (decreasing)
	Press for 3 seconds to deactivate setting.

# Status display symbols

The additional symbols at the bottom edge of the status display enable quick access to alarm information and details of the appliance state.

Symbol	Appliance status
ß	<b>Alarm symbol (grey)</b> Alarm archive is empty. Pressing briefly opens the alarm archive.
AB	Alarm symbol (white) There are confirmed alarms in the alarm archive. Pressing briefly opens the alarm archive.
A B	Alarm symbol (red) There are still unconfirmed alarms in the alarm archive. Pressing briefly opens the alarm archive.
KB	<b>Alarm symbol (red, flashing)</b> There is an active alarm in the archive. Pressing briefly opens the alarm archive.
*	<b>Defrosting symbol (grey)</b> No active defrosting process.
×B	Defrosting symbol (white, flashing) Manual defrosting process active. Pressing briefly opens the manual defrosting. (see 5.3.23 Defrosting )
<b>A*</b>	<b>Defrosting symbol (white)</b> Automatic defrosting process active. Function cannot be aborted.
	Door lock symbol (white, closed) The door lock is active. Pressing briefly opens the code entry for opening the door. (see 5.3.6 Door lock )



Door lock symbol (white, open)

Appliance status

The door lock is inactive. Brief press opens the code entry for

locking the door. (see 5.3.6 Door lock )

Additional status display symbols

# 5.1.3 Acoustic signals

A signal sounds in the following cases:

- If a function or a value is confirmed.
- If a function or a value can either not be activated or not deactivated.
- As soon as an error occurs.
- If there is an alarm message.

The alarms can be switched on and off in the customer menu.

# 5.2 Navigation

Navigate in the menu to access the individual functions. Operation using the touch display via swiping and tapping.

# 5.2.1 Navigation with the touch display

Navigation	Description
ß	<b>Press briefly</b> Activates / deactivates function. Confirms selection. Opens submenu.
() (33)	Press and hold (3 seconds) Activates / deactivates function. Confirms selection. Resets appliance / values. Switches appliance on / off.
<b>*</b> 15	<b>Swipe right or left</b> Navigates within the menu.
Back	<b>Tap "Back" symbol briefly</b> Goes back one level.
Back 33	Press and hold (3 seconds) "Back" symbol Goes back to status display.

# 5.2.2 Settings menu

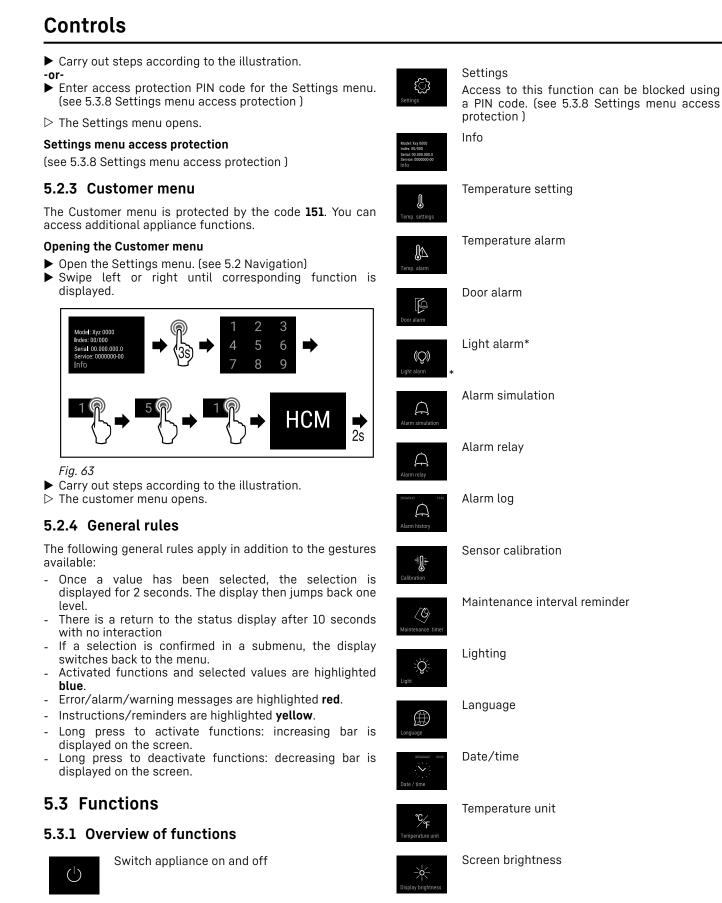
You can access additional appliance functions via the Settings menu.

# Opening the Settings menu

Swipe left or right until corresponding function is displayed.



Fig. 62

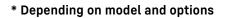




Reset recording



Manually starts automatic defrosting



Data download

LAN \*

古古



# WiFi \*



# Door lock



SmartLock



SmartLock delay



System status\*



Software



Door lock PIN code change



Settings lock PIN code change



SmartLock PIN code change

Activate/deactivate settings lock



.



Alarms



Button sounds



Door lighting



Defrost information



Sensor Info



DemoMode



Factory reset



This function makes it possible to switch the entire appliance on and off.

# Switching on appliance Without activated DemoMode:



Fig. 64

# Complete the steps.With activated DemoMode:

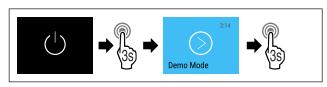


Fig. 65Complete the steps.

# Note

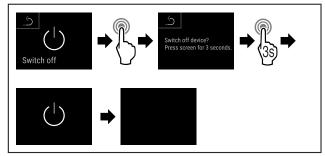
Deactivate DemoMode before countdown finishes.



- Fig. 66 Status display
- $\triangleright$  The temperature appears in the display.

# Switching off appliance

- ► Call up the settings menu. (see 5.2 Navigation)
- Swipe left or right on the display until the corresponding function is displayed.



- Fig. 67
- Complete the steps.
- $\triangleright$  Standby symbol is shown in the display.
- ▷ Display switches off after approximately 10 minutes.

# 5.3.3 Temperature Temp.settings

The temperature inside the appliance is set to 5 °C (+/-3 K) as required by DIN 13277 and cannot be changed.

# Note

()

Do not stock the produce for cooling until the temperature in the appliance is 5 °C.

The temperature depends on the following factors:

- How often the door is opened
- How long the door is open for
- The room temperature of the installation site
- The type, temperature and amount of refrigerated food

## Note

The temperature may differ from the temperature displayed in some areas of the interior.

At the correct temperature, cooled produce will keep for longer. This avoids disposing of food unnecessarily.

# 5.3.4 Temperature recording



The appliance displays the minimum and maximum temperatures of the interior via this function. The recording of these temperatures starts automatically after the appliance is switched on; they are recorded at one minute intervals. A note indicating that the data memory is full is displayed after 999 hours (approx. 40 days). The temperature recording should then be reset.

## Note

The entire temperature history as well as alarm and service messages are also recorded independently of this function. This data can be exported and backed up on a USB storage medium. (see 5.3.24 Data download / Datalogging )

If there is an additional product sensor installed on the appliance, there is the option of selecting this sensor to display the minimum and maximum temperatures. (see 5.3.25 Sensor calibration)

#### Note

The temperature recording should be reset once **after reaching the set temperature** when the appliance is commissioned. (see 5.3.4.2 Resetting temperature recording) This ensures that the value for the maximum temperature is a meaningful value.

#### **Displaying temperature recording**

The temperature recording displays the length of the recording and the minimum and maximum temperatures measured during this period of time.



Fig. 68

- Swipe left or right until corresponding function is displayed.
- Status screen with the temperature recordings is displayed.

## **Resetting temperature recording**

The displayed minimum and maximum temperatures can be reset at any time. This deletes the displayed values and the recording interval starts again.

Swipe left or right until corresponding function is displayed.

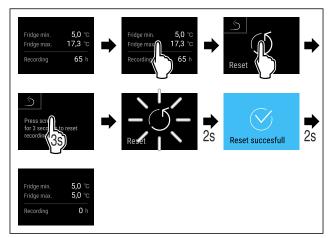


Fig. 69

Complete the steps.

▷ Temperature recording is reset.



The appliance is fitted with interior lighting.

You can keep the interior lighting on continuously. (see 5.3.5.1 Switching on lighting\*) \*

When you open the appliance door, the interior lighting switches on. You can also deactivate this function. (see 5.3.5.3 Switching off the lighting when opening the door)

#### Switching on lighting\*

- ► Call up settings menu. (see 5.2 Navigation)
- Swipe left or right until corresponding function is displayed.

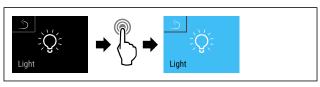


Fig. 70

- Complete steps (see Fig. 70) .
- ▷ Lighting is switched on.

#### Switching off lighting\*

- Call up settings menu. (see 5.2 Navigation)
- Swipe left or right until corresponding function is displayed.

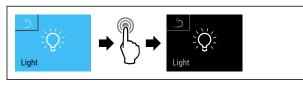


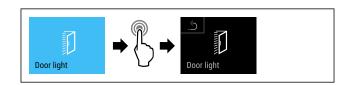
Fig. 71

Complete steps (see Fig. 71) .

 $\triangleright$  Lighting is switched off.

#### Switching off the lighting when opening the door

Call up customer menu. (see 5.2 Navigation)
 Swipe left or right until corresponding function is displayed.

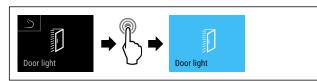


# Fig. 72

- Complete the steps (see Fig. 72) .
- Dash The lighting is switched off when the door is opened.

## Switching on the lighting when opening the door

- ► Call up customer menu. (see 5.2 Navigation)
- Swipe left or right until corresponding function is displayed.



## Fig. 73

5.3.6 Door lock

- Complete the steps (see Fig. 73) .
- $\triangleright$  The lighting is switched on when the door is opened.



The appliance is fitted with an electronic door lock. When using the first time, the door is unlocked and you can open it.

This function means the appliance can be secured against the unwanted removal of items.

You have the following setting options for this:

- Lock door using door code.
- Unlock door using door code.
- Activate automatic locking.
- Deactivate automatic locking.
- Set time delay for automatic locking.
- Change the door code. (see 5.3.9 Access codes)
- Reset the door code. (see 5.3.9 Access codes)
- Pair remote control. (see 5.3.10 Remote control )

## Locking door using door code

#### Note

► In the following example, the factory-set PIN code: **1111** is used.



# Fig. 74 Status display

Starting from the status display, the door code entry begins by pressing the open padlock symbol.

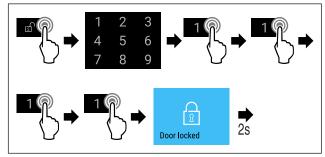


Fig. 75 Locking door using door code 1 1 1 1. Complete steps (see Fig. 75).



- Fig. 76 Status display
- ▷ The status display with a white border and closed padlock symbol appears.
- $\triangleright$  The door is locked.

## Unlocking door using door code

# Note

In the following example, the factory-set PIN code: 1111 is used.



#### Fig. 77 Status display

Starting from the status display with the white border, the door code entry begins by pressing the closed padlock symbol.

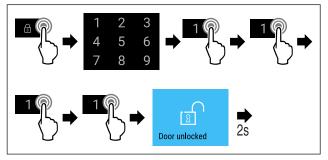


Fig. 78 Locking door using door code 1 1 1 1.
Complete steps (see Fig. 78).

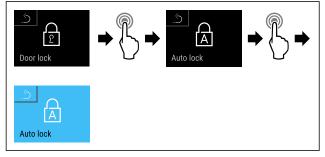


Fig. 79 Status display

- ▷ The status display with an open padlock symbol appears.
- $\triangleright$  The door is unlocked.

## Activating automatic locking

- Call up settings menu. (see 5.2 Navigation)
- Swipe left or right until corresponding function is displayed.



#### Fig. 80

- Complete steps (see Fig. 80).
- $\triangleright$  Automatic locking is activated.
- The time delay (see 5.3.6.5 Setting time delay for automatic locking) can now be set.

## Note

You can continue to lock and unlock the door using the remote control (see 5.3.10 Remote control ) or by entering the door code.

## Deactivating automatic locking

Call up settings menu. (see 5.2 Navigation)

Swipe left or right until corresponding function is - Setting the locking delay. displayed.

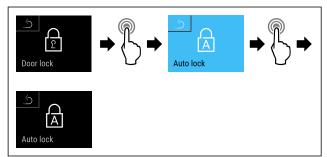


Fig. 81

- Complete steps (see Fig. 81).
- $\triangleright$  Automatic locking is deactivated.

## Setting time delay for automatic locking

This function determines when the door is locked electronically after being opened.

Make sure that the following requirements are fulfilled:

- □ The automatic door locking (see 5.3.6.3 Activating automatic locking) is activated.
- Call up settings menu. (see 5.2 Navigation)
- Swipe left or right until corresponding function is ► displayed.

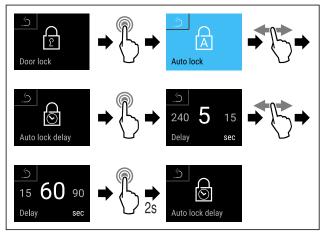


Fig. 82 The following values can be set: 5, 15, 60, 90, 120, 180 and 240 seconds

► Complete steps (see Fig. 82).

 $\triangleright$  Time delay is set.

# Changing the door code

(see 5.3.9 Access codes)

# Resetting the door code

(see 5.3.9 Access codes)

# Pairing remote control

(see 5.3.10 Remote control )





To prevent the removal of the cooled produce, this function enables automatic door locking after the temperature alarm has been triggered. (see 5.3.26 Temperature alarm ) The locking delay time can be set. The door can then only be opened with the SmartLock PIN code.

## Application:

- Activating the SmartLock.
- Deactivating the SmartLock.

- Unlocking the door lock with the SmartLock PIN code.
- Changing the SmartLock PIN code. (see 5.3.9 Access codes)
- Resetting the SmartLock PIN code. (see 5.3.9 Access codes)

## Activating SmartLock

## Note

- ► In the following example. the factory-set PIN code: 1 1 1 1 is used.
- Call up settings menu. (see 5.2 Navigation)
- ► Swipe left or right until corresponding function is displayed.

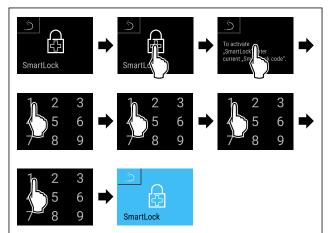


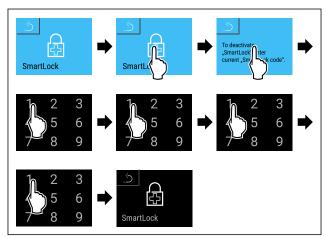
Fig. 83

- Complete steps (see Fig. 83).
- ▷ SmartLock is activated.
- $\triangleright$  The locking delay interval can now be selected. (see 5.3.7.3 Šetting locking delay)

# **Deactivating SmartLock**

## Note

- ► In the following example, the factory-set PIN code: 1 1 1 1 is used.
- Call up settings menu. (see 5.2 Navigation)
- Swipe left or right until corresponding function is ► displayed.

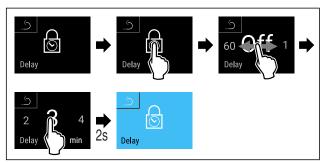


- Fig. 84
- Complete steps (see Fig. 84).
- ▷ SmartLock is deactivated.

## Setting locking delay

Make sure that the following requirements are fulfilled:

- □ SmartLock must be activated. (see 5.3.7.1 Activating SmartLock)
- Call up settings menu. (see 5.2 Navigation)
- Swipe left or right until corresponding function is displayed.



*Fig.* 85 The following values can be set: Off (no waiting time) up to 60 minutes; in 1-minute increments

- Complete steps (see Fig. 85) .
- $\triangleright$  The time for the locking delay has been set.

## Unlocking door lock with SmartLock PIN code

After the temperature alarm has been triggered (see 5.3.26 Temperature alarm ) the door is locked automatically via the SmartLock function.

Opening is now only possible with the SmartLock PIN code.

#### Note

In the following example, this SmartLock PIN code is used: 2 3 4 5

Entry of the SmartLock PIN code starts from the status display. Information about the SmartLock function and the temperature recording for the temperature alarm are displayed.

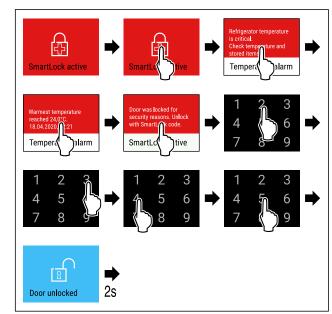


Fig. 86

- Complete steps (see Fig. 86) .
- Dash The door is unlocked.



Fig. 87 Status display

 $\triangleright$  The temperature appears in the display.

# Changing the SmartLock PIN code

(see 5.3.9 Access codes)

## Resetting the SmartLock PIN code

(see 5.3.9 Access codes)



# 5.3.8 Settings menu access protection

This function enables the settings menu access protection via a four-digit PIN code.

Application:

- Prevent settings and functions being changed unintentionally.
- Prevent appliance being switched off unintentionally.
- Prevent temperature being set unintentionally.

## Activating the settings menu access protection

Note
In the following example, the factory-set PIN code: 1 1 1 1 is used.

- ► Call up customer menu. (see 5.2 Navigation)
- Swipe left or right until corresponding function is displayed.

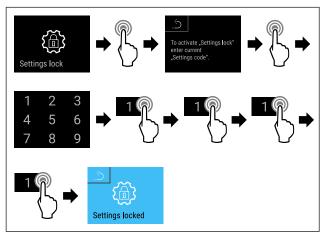


Fig. 88

Complete steps (see Fig. 88) .

▷ Settings menu access protection is activated.

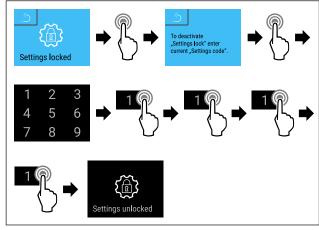
# Changing the access protection PIN code for the settings menu

(see 5.3.9 Access codes)

## Deactivating the settings menu access protection

#### Note

- ► In the following example, the factory-set PIN code: 1111 is used.
- ► Call up customer menu. (see 5.2 Navigation)
- Swipe left or right until corresponding function is displayed.



## Fig. 89

- Complete steps (see Fig. 89) .
- ▷ Settings menu access protection is deactivated.

## **Opening protected settings menu**

If the settings menu access protection is active, it is necessary to enter the PIN code to open the settings menu. The settings menu remains unlocked for 20 minutes after entering the correct PIN code.

#### Note

- ▶ In the following example, the factory-set PIN code: **1 1 1 1** is used.
- Access protection for the settings menu must be active.
- Swipe left or right until corresponding function is displayed.

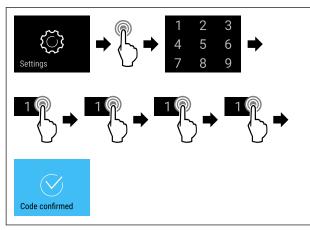


Fig. 90

- Complete the steps (see Fig. 90).
- $\triangleright$  PIN code is correct: settings menu opens.

# 5.3.9 Access codes

Various settings are possible.

## Application:

- Changing the door code.
- Resetting the door code.
- Changing the setting code.
- Resetting the setting code.
- Changing the SmartLock code.
- Resetting the SmartLock code.



#### Changing door code

The setting allows the door code for the door lock to be changed.

The setting is made in three stages:

- Entering the old door code
- Entering the new door code
- Confirming the new door code

#### Note

- In the following example, the default factory set door code 1 1 1 is changed.
- The new door code is: 2 3 4 5
- Call up customer menu. (see 5.2 Navigation)
- Swipe left or right until corresponding function is displayed.

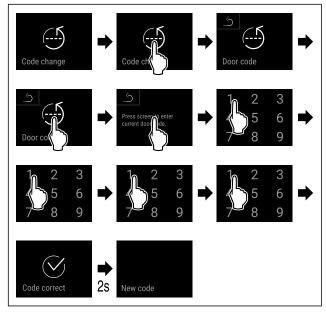


Fig. 91

- Complete the steps (see Fig. 91) .
- $\triangleright$  Entry of the old door code successful.

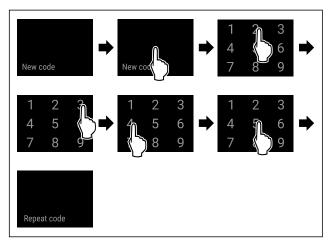
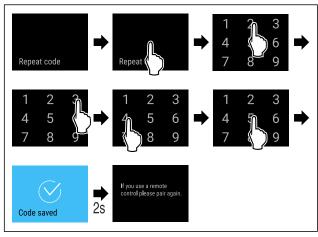


Fig. 92

- Complete steps (see Fig. 92) .
- ▷ Entry of the new door code successful.



## Fig. 93

- ► Complete steps (see Fig. 93) .
- $\triangleright$ Confirmation of the new door code successful.
- $\triangleright$  The door code has been changed.

# **Resetting door code**

- Door code forgotten or not known.
- ▶ Reset appliance to factoy settings. (see 5.3.33 Factory reset)
- $\triangleright$ The appliance is reset to the original settings.
- > The factory setting for the door code is: **1 1 1 1**



# Settings menu access protection

## Changing the settings code

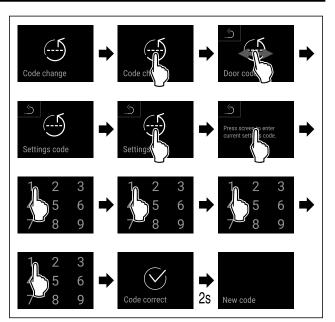
This setting allows the setting code for settings menu access protection to be changed.

The setting is made in three stages:

- Entering the old settings code -
- -Entering the new settings code
- \_ Confirming the new settings code

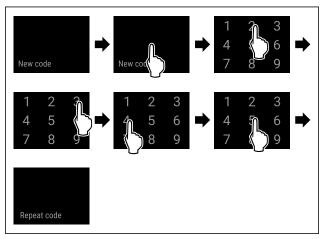
#### Note

- ▶ In the following example, the default factory-set settings code 1 1 1 1 is changed.
- The new settings code is: 2 3 4 5
- Call up customer menu. (see 5.2 Navigation) The settings menu access protection must be active. (see 5.3.8 Settings menu access protection )
- Swipe left or right until corresponding function is ► displayed.



## Fig. 94

- ► Complete steps (see Fig. 94).  $\triangleright$  Entry of the old settings code successful.



#### Fig. 95

Complete steps (see Fig. 95). ►

 $\triangleright$  Entry of the new settings code successful.

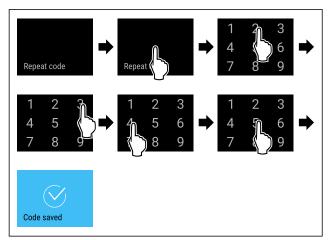


Fig. 96

- ► Complete steps (see Fig. 96).
- ▷ Confirmation of the new settings code successful.
- $\triangleright$  The settigs code has been changed.

# Resetting the setting code

The setting code for the settings menu access protection has been forgotten or is not known.

- Reset appliance to factory settings (see 5.3.33 Factory) reset).
- $\triangleright$  The appliance is reset to the original settings.
- ▷ The factory-set setting code is: **111**



## Changing SmartLock code

This setting makes it possible to change the SmartLock code.

The setting is made in three stages:

- Entry of the old SmartLock code
- Entry of the new SmartLock code
- Confirmation of the new SmartLock code

## Note

- In the following example, the default factory-set Smart-Lock code 1 1 1 1 is changed.
- ▶ The new SmartLock code is: 2 3 4 5
- Call up customer menu. (see 5.2 Navigation) ► SmartLock must be active. (see 5.3.7 SmartLock )
- Swipe left or right until corresponding function is displayed.

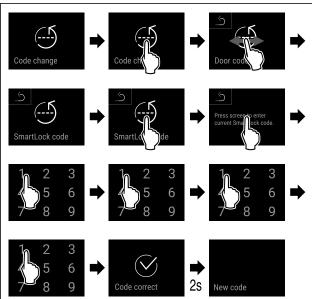
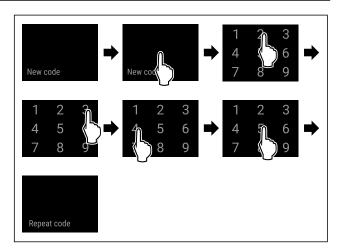


Fig. 97

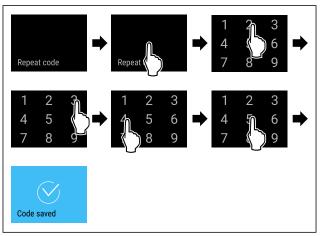
- Complete steps (see Fig. 94).
- ▷ Entry of the old SmartLock code successful.



# Fig. 98

Complete steps (see Fig. 95).

▷ Entry of the new SmartLock code successful.



## Fig. 99

- Complete steps (see Fig. 99).
- > Confirmation of the new SmartLock code successful.
- ▷ The SmartLock code has been changed.

## Resetting SmartLock code

- SmartLock code forgotten or not known.
- Reset appliance to factory settings. (see 5.3.33 Factory) reset)
- $\triangleright$  The appliance is reset to the original settings.
- ▷ The factory setting for the SmartLock code is: **1 1 1 1**

# 3) 5.3.10 Remote control

When supplied, a factory PIN code is stored on the remote control. This opens every appliance with factory settings unchanged (see 5.3.33 Factory reset ) . This means multiple appliances can be opened and closed with just one remote control. Pairing generates an appliance-specific PIN code which can only open and close the appliance which is signed in. A factory reset restores the original functionality.

## Application:

- Pairing remote control.
- Unpairing remote control.

## Pairing remote control

- Call up settings menu. (see 5.2 Navigation)
- Swipe left or right until corresponding function is ► displayed.

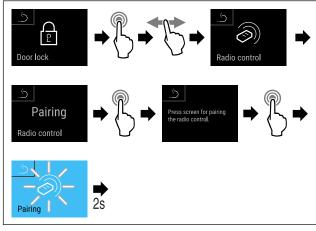


Fig. 100

Complete steps (see Fig. 100).

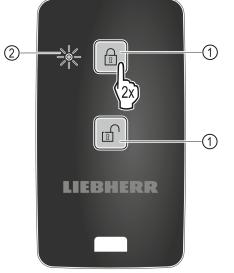


Fig. 101

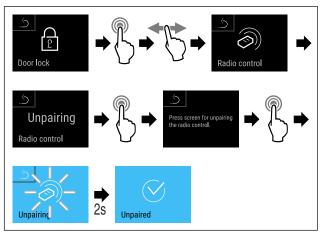
- Press a button on the remote *Fig. 101 (1)* control twice.
- > The status LED *Fig. 101 (2)* on the remote control flashes three times.

Paired

Paired Die Fernbedienung ist mit dem Gerät verbunden.

# Unpairing remote control

- ► Call up settings menu. (see 5.2 Navigation)
- Swipe left or right until corresponding function is displayed.



# Fig. 102

- Complete steps (see Fig. 102) .
- $\triangleright$  The remote control is disconnected from the appliance.



Setting for the time interval after which a maintenance reminder is issued.

The following values can be set:

- 7 days
- 14 days
- 30 days
- 60 days
- 90 days
- 180 days
- 360 days
- 720 days
- 1080 days
- Off

# Setting maintenance interval reminder

The following steps describe how the maintenance interval is set.

- ► Call up settings menu. (see 5.2 Navigation)
- Swipe left or right until corresponding function is displayed.

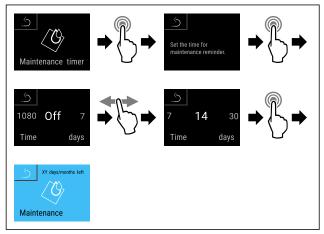


Fig. 103

- Complete steps (see Fig. 103) .
- $\triangleright$  The time interval, after which the maintenance reminder is issued, is set.
- $\triangleright$  The remaining time is displayed.



This setting allows the display language to be set.

## Setting language

- ► Call up settings menu. (see 5.2 Navigation)
- Swipe left or right until corresponding function is displayed.

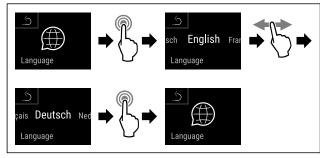


Fig. 104

- Complete steps (see Fig. 104) .
- $\triangleright$  The selected language is set.

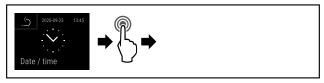
# 5.3.13 Date and time

ime Date / time

This setting makes it possible to set the date and time.

# Setting date and time

- ► Call up settings menu. (see 5.2 Navigation)
- Swipe left or right until corresponding function is displayed.



# Fig. 105

Complete steps (see Fig. 105).

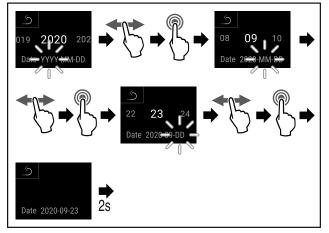


Fig. 106

- Complete steps (see Fig. 106) .
- $\triangleright$  Date has been set.

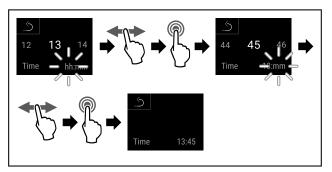


Fig. 107

Complete steps (see Fig. 107) .

Dash Time has been set.

# 5.3.14 Temperature unit

This setting allows the temperature unit to be changed between degrees Celsius and Fahrenheit.

ᢟᢛ

# Setting temperature unit

The example shows how you change the temperature unit from degrees Celsius to Fahrenheit.

- Call up settings menu. (see 5.2 Navigation)
- Swipe left or right until corresponding function is displayed.

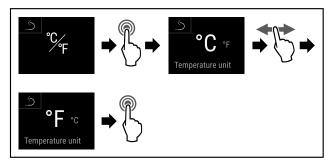


Fig. 108

- Complete steps (see Fig. 108) .
- ▷ The temperature unit is set as Fahrenheit.



# **5.3.15 Display brightness** Display brightness This setting allows the display brightness to be adjusted incrementally.

The following brightness values can be set:

- 40%
- 60%
- 80%
- 100% (default)

# Setting display brightness

The following steps describe how to reduce the display brightness, e.g. from 100 % to 40 %.

- ► Call up settings menu. (see 5.2 Navigation)
- Tap navigation arrow repeatedly until corresponding function is displayed.

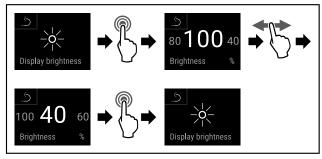


Fig. 109

- Carry out steps according to the illustration.
- > Display brightness changes accordingly.

# 5.3.16 Alarm Sound

This function enables all alarm sounds, such as door alarms, to be switched on and off.

# **Activating Alarm Sound**

- ► Call up customer menu. (see 5.2 Navigation)
- Swipe left or right until corresponding function is displayed.

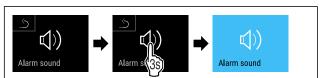


Fig. 110

- Complete steps (see Fig. 110) .
- ▷ Alarm Sound is activated.

## **Deactivating Alarm Sound**

- ► Call up customer menu. (see 5.2 Navigation)
- Swipe left or right until corresponding function is displayed.



Fig. 111

- Complete steps (see Fig. 111).
- ▷ Alarm Sound is deactivated.



This function makes it possible to switch all button sounds, confirmation sounds, and the startup sound on and off.

## Activating Key Sound

- Call up customer menu. (see 5.2 Navigation)
- Swipe left or right on the display until the corresponding function is displayed.



Fig. 112

- Complete steps (see Fig. 112) .
- ▷ Key Sound is activated.

# **Deactivating Key Sound**

Call up customer menu. (see 5.2 Navigation)



## Fig. 113

- Complete steps (see Fig. 113).
- ▷ Key Sound is deactivated.

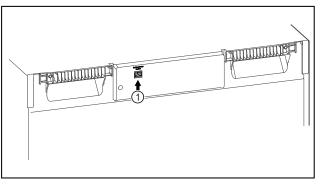
# 5.3.18 WiFi connection



## Note

Use of the Liebherr SmartMonitoring Dashboard at https:// smartmonitoring.liebherr.com requires installation of a SmartModule and a commercial MyLiebherr account. When commissioning online you can register using the login data you have, or register again and create a company account.

This setting establishes a wireless connection between the appliance and the internet. The connection is controlled via the SmartModule. The appliance can be integrated via the browser-based Liebherr SmartMonitoring Dashboard and advanced options as well as customised methods relating to control, administration and monitoring can be used.



## Fig. 114

Make sure that the following requirements are fulfilled: SmartModule *Fig. 114 (1)* is in use.

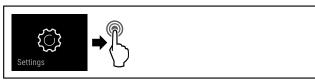
## **Establishing connection**

You commission and set up your SmartModule online via the Liebherr SmartMonitoring Dashboard on your web-enabled device.



## Fig. 115

- ► Open Liebherr SmartMonitoring Dashboard. (see Fig. 115) On the refrigerator or freezer:
- Swipe left or right until corresponding function is displayed.



## Fig. 116

Complete the steps (see Fig. 116).

#### Note

The settings menu access protection is activated. (see 5.3.8 Settings menu access protection )

- Enter the chosen PIN code. The settings menu opens.
- Swipe left or right until corresponding function is displayed.

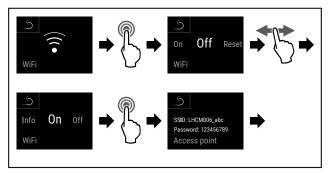


Fig. 117

- Complete the steps (see Fig. 117) .
- Continue the set-up procedure on your web-enabled device: Liebherr SmartMonitoring Dashboard

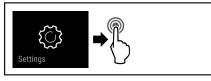


Fig. 118

- ▶ Complete the steps (see Fig. 118) .
- Connection is established: WiFi connecting appears. The symbol flashes.
- Follow the Liebherr SmartMonitoring Dashboard instructions.
- $\triangleright$  Connection is established.

## Disconnecting

Swipe left or right until corresponding function is displayed.



# Fig. 119

Complete the steps (see Fig. 119) .

# Note

The settings menu access protection is activated. (see 5.3.8 Settings menu access protection )

- Enter the chosen PIN code. The settings menu opens.
- Swipe left or right until corresponding function is displayed.

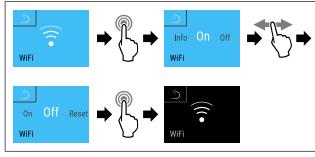
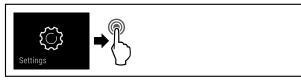


Fig. 120

- ▶ Complete the steps (see Fig. 120) .
- $\triangleright$  There is no connection.

# **Resetting connection**

Swipe left or right until corresponding function is displayed.



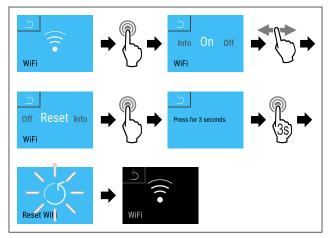
## Fig. 121

Complete the steps (see Fig. 116) .

## Note

The settings menu access protection is activated. (see 5.3.8 Settings menu access protection ) ► Enter the chosen PIN code. The settings menu opens.

- Enter the chosen PIN code. The settings menu opens.
- Swipe left or right until corresponding function is displayed.





- Complete the steps (see Fig. 122) .
- $\triangleright$  The WiFi settings are restored to the factory settings.

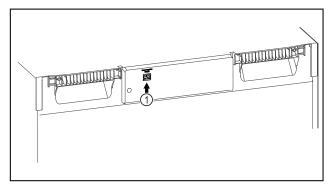
# 5.3.19 LAN connection

## Note

Use of the Liebherr SmartMonitoring Dashboard at https:// smartmonitoring.liebherr.com requires installation of a SmartModule and a commercial MyLiebherr account. When commissioning online you can register using the login data you have, or register again and create a company account.

묾

This setting establishes a wired connection between the appliance and the internet. The connection is controlled via the SmartModule. The appliance can be integrated via the browser-based Liebherr SmartMonitoring Dashboard and advanced options as well as customised methods relating to control, administration and monitoring can be used.





Make sure that the following requirements are fulfilled: SmartModule *Fig. 123 (1)* is in use.

A network cable is connected.

# **Establishing connection**

You commission and set up your SmartModule online via the Liebherr SmartMonitoring Dashboard on your web-enabled device.



Fig. 124

Open Liebherr SmartMonitoring Dashboard. (see Fig. 124)

On the refrigerator or freezer:

 Swipe left or right until corresponding function is displayed.



Fig. 125

▶ Complete the steps (see Fig. 125) .

#### Note

The settings menu access protection is activated. (see 5.3.8 Settings menu access protection )

- Enter the chosen PIN code. The settings menu opens.
- Swipe left or right until corresponding function is displayed.

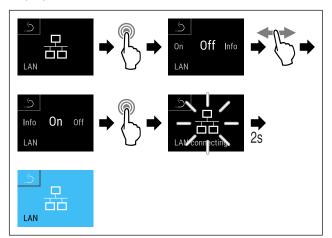


Fig. 126

- ► Complete the steps (see Fig. 126).
- Connection is established: LAN connecting appears. The symbol flashes.
- ► Follow the Liebherr SmartMonitoring Dashboard instructions.
- $\triangleright$  Connection is established.

# Disconnecting

Swipe left or right until corresponding function is displayed.

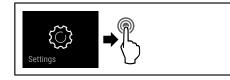


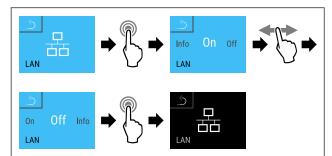
Fig. 127 ► Complete the steps (see Fig. 127).

#### Note

The settings menu access protection is activated. (see 5.3.8 Settings menu access protection )

Enter the chosen PIN code. The settings menu opens.

Swipe left or right until corresponding function is displayed.



# Fig. 128

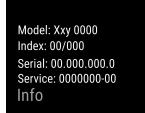
- Complete the steps (see Fig. 128).
- $\triangleright$  There is no connection.



This display shows the model, serial number and service number of the appliance.

# **Displaying Info**

Swipe left or right until the corresponding function is displayed.



#### Fig. 129

 $\triangleright$  The appliance information appears.



The display shows the appliance operating hours.

## **Displaying operating hours**

▶ Open customer menu .

00:00

Operating hours: 000000 Battery status: xxx% Main.timer left: XXXX

# System status

# Fig. 130

 $\triangleright$  The operating hours appear.



The display shows the software version of the appliance.

# Displaying software version

- Open customer menu .
- Swipe left or right until the corresponding function is displayed.



Fig. 131

 $\triangleright$  The software version is shown.



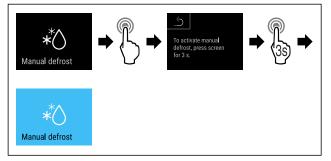
The appliance defrosts automatically in normal mode.

## Application:

 If there is excessive ice in the interior, the defrosting function can be started manually.

## Manually starting automatic defrosting

Swipe left or right until corresponding function is displayed.

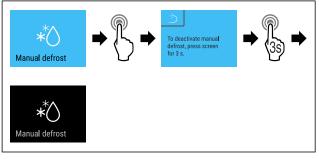


## Fig. 132

- Complete steps (see Fig. 132) .
- Automatic defrosting has been started. The appliance automatically switches back to normal mode once defrosting has finished.

## Cancelling manually started defrosting

Swipe left or right until corresponding function is displayed.



## Fig. 133

- Complete steps (see Fig. 133) .
- $\triangleright$  Manually started defrosting is cancelled. The appliance automatically switches back to normal mode.

# Defrosting info

This setting adjusts the display during an automatic defrosting process.

The following display variants are available:

- Def 1: "Automatic defrosting process" symbol is displayed in the status screen. The temperature display is not updated and shows the last temperature before the automatic defrosting process was started.
- **Def 2**: "Automatic defrosting process" symbol is displayed in the status screen. The temperature display is updated continuously and shows the actual temperature.
- Def 3: The temperature display is not updated and shows the last temperature before the automatic defrosting process was started.
- **Def 4**: The temperature display is updated continuously and shows the actual temperature.



Fig. 134 "Automatic defrosting process" symbol
 Call up customer menu. (see 5.2 Navigation)

 Swipe left or right until corresponding function is displayed.

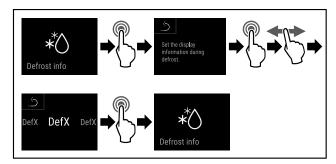


Fig. 135

- Complete steps (see Fig. 135) .
- > The desired display variant has been selected.



# 5.3.24 Data download / Datalogging 🖪

The appliance automatically records the entire temperature history of various sensors as well as alarm and service messages. The recording starts automatically after the appliance is switched on and records at one minute intervals. The data for the past 5 years is stored and can be downloaded onto a USB stick at any time.

The following data sets can be selected for download:

- Temperatures
- Alarms
- Service messages
- All

The selected data sets are stored in unencrypted format as text files over the entire recording period; these files have the extension ".log".

# Data download on USB stick

## Note

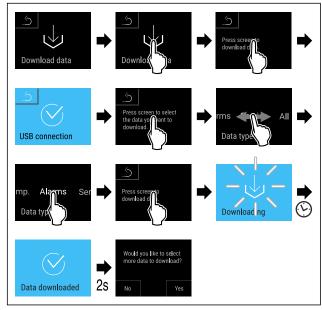
Only USB memory sticks may be connected to the USB interface. USB hard drives are not detected.

#### Note

Do not remove the USB storage stick during the download procedure.

Make sure that the following requirements are fulfilled:

- USB stick is connected.
- Call up settings menu. (see 5.2 Navigation)
- Swipe left or right until corresponding function is displayed.



#### Fig. 136

- Complete steps (see Fig. 136) .
- ▷ Successful data download on USB stick.
- Dash It is possible to select and download further data sets.

# 5.3.25 Sensor calibration



The sensor calibration is used to realign differences between the displayed temperature and the actual temperature in the appliance.

Setting range for C sensor (control sensor): +/- 3 Kelvin in 0.1 Kelvin increments.

Setting range for P sensor (product sensor): +/- 9.9 Kelvin in 0.1 Kelvin increments

## **Calibrating sensor**

- Call up settings menu. (see 5.2 Navigation)
- Swipe left or right until corresponding function is displayed.

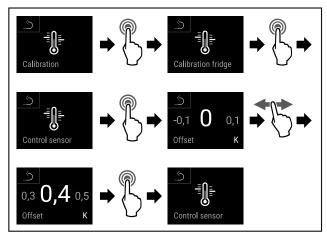
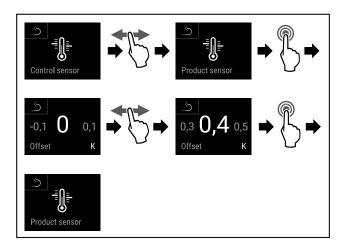


Fig. 137

- Complete steps (see Fig. 137) .
- $\triangleright$  C sensor has been calibrated.



#### Fig. 138

Complete steps (see Fig. 138).

 $\triangleright$  P sensor has been calibrated.

 $\triangleright$  Sensor calibration has been completed.



# 5.3.26 Temperature alarm

The temperature alarm is triggered as soon as the interior temperature departs from the settable temperature range.

The following values can be set:

- Lower temperature limit in 0.1 °C increments
- Upper temperature limit in 0.1 °C increments
- Alarm delay time of between 0 and 60 minutes
- Alarm repetition frequency of between 0 and 30 minutes

## Setting temperature alarm

- Call up settings menu. (see 5.2 Navigation)
- Swipe left or right until corresponding function is displayed.



Fig. 139

- Complete steps (see Fig. 139).
- Swipe left or right until corresponding function is displayed.

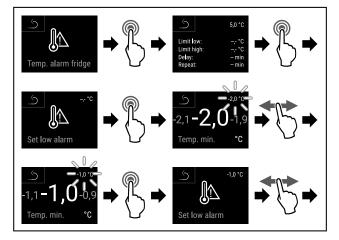


Fig. 140

- Complete steps (see Fig. 140) .
- $\triangleright$  Lower temperature limit has been set.

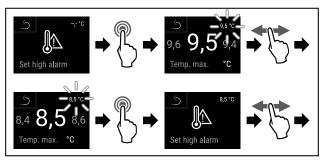


Fig. 141

- Complete steps (see Fig. 141) .
- $\triangleright$  Upper temperature limit has been set.

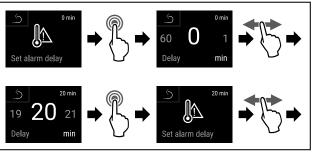
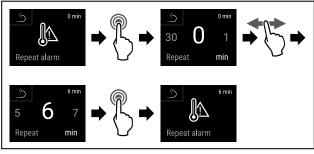


Fig. 142

- Complete steps (see Fig. 142) .
- $\triangleright$  Alarm delay time has been set.



# Fig. 143

- ► Complete steps (see Fig. 143) .
- $\triangleright$  Alarm repetition interval has been set.
- ▷ Temperature alarm has been set.

# Displaying set temperature alarm values

- ► Call up settings menu. (see 5.2 Navigation)
- Swipe left or right until corresponding function is displayed.

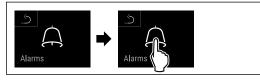


Fig. 144

- Complete steps (see Fig. 144) .
- Swipe left or right until corresponding function is displayed.



Fig. 145

- Complete steps (see Fig. 145) .
- $\triangleright$  Set temperature alarm values are displayed.



Setting the time interval after which the door alarm sounds when the door is opened.

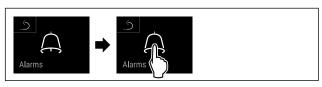
The following values can be set:

- 15 seconds
- 30 seconds
- 60 seconds
- 90 seconds
- 120 seconds
- 150 seconds
- 180 seconds
- Off

## Setting door alarm

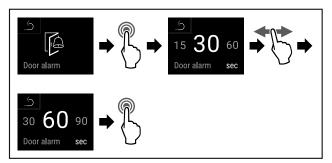
The following steps describe how you set the time interval before the door alarm sounds.

- Call up settings menu. (see 5.2 Navigation)
- Swipe left or right until corresponding function is displayed.



## Fig. 146

- Carry out steps according to the illustration.
- Swipe left or right until corresponding function is displayed.



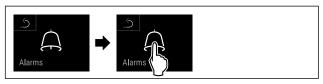
# Fig. 147

- ► Carry out steps according to the illustration.
- $\triangleright$  The door alarm is set.

## Deactivating door alarm

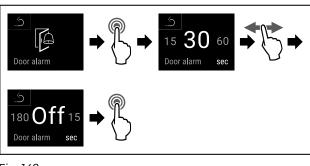
The following steps describe how you deactivate the door alarm.

- Call up settings menu. (see 5.2 Navigation)
- Swipe left or right until corresponding function is displayed.



# Fig. 148

- Carry out steps according to the illustration.
- Swipe left or right until corresponding function is displayed.



#### Fig. 149

- Carry out steps according to the illustration.
- $\triangleright$  The door alarm is deactivated.



This setting allows the visual alarm messages in the display to also be emphasised by flashing appliance lighting.

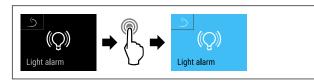
#### Activating light alarm

- Call up settings menu. (see 5.2 Navigation)
- Swipe left or right until corresponding function is displayed.



#### Fig. 150

- Complete steps (see Fig. 150) .
- Swipe left or right until corresponding function is displayed.



#### Fig. 151

- Complete steps (see Fig. 151) .
- $\triangleright$  The light alarm is activated.

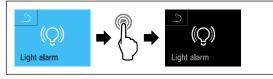
#### Deactivating light alarm

- Call up settings menu. (see 5.2 Navigation)
- Swipe left or right until corresponding function is displayed.



Fig. 152

- Complete steps (see Fig. 152) .
- Swipe left or right until corresponding function is displayed.



#### Fig. 153

- Complete steps (see Fig. 153) .
- $\triangleright$  The light alarm is activated.

# 5.3.29 Alarm simulation



This setting makes it possible to simulate a change in the appliance temperature to check the function of any safety devices that may be connected.

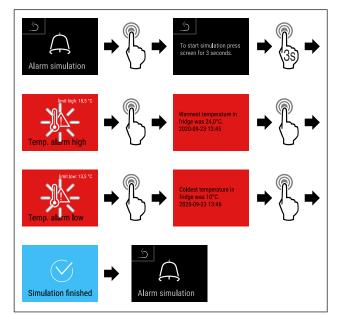
#### Starting alarm simulation

- Call up settings menu. (see 5.2 Navigation)
- Swipe left or right until corresponding function is displayed.



#### Fig. 154

- Complete steps (see Fig. 154) .
- Swipe left or right until corresponding function is displayed.



#### Fig. 155

- Complete steps (see Fig. 155) .
- $\triangleright$  The simulation has been performed.
- $\triangleright$  Connected safety devices should have triggered.



This setting makes it possible to query and delete the last 10 alarms that have occurred on the device.

#### The following is displayed:

- Current date and time
- Active alarms (red).
- Past alarms, which have not yet been queried, are shown as **unconfirmed (red)**.
  - Confirmation is given by swiping to the next error.
- Alarms, which have been queried, are shown as confirmed.
- Deletion of all alarms (including active and unconfirmed alarms).

#### Displaying alarm log and deleting an alarm

- Swipe left or right until corresponding function is displayed.
- -or-

# Controls

Via the display symbol at the bottom edge of the status display.

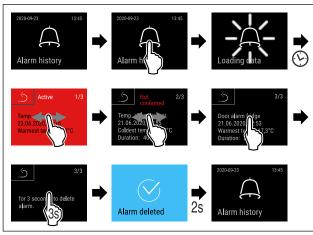


Fig. 156

- Complete steps (see Fig. 156) .
- ▷ The querying and deletion of an alarm has been performed.

#### Displaying alarm log and deleting all alarms

- Swipe left or right until corresponding function is displayed.
   -or-
- Via the display symbol at the bottom edge of the status display.

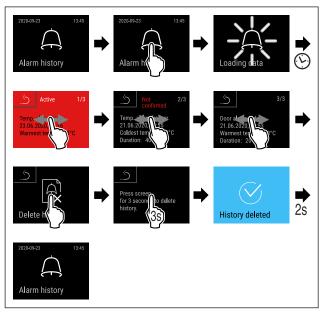


Fig. 157

- Complete steps (see Fig. 157) .
- > The querying and deletion of all alarms has been performed.



This setting makes it possible to relay one or more alarms to an external alarm source connected to the appliance.

The following settings can be selected:

- Alarm type:
  - Door alarm

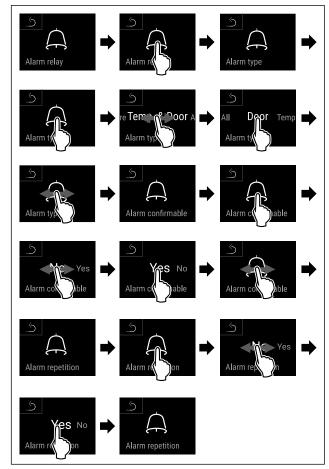
5.3.31 Alarm relay

- Temperature alarm
- Door alarm and temperature alarm
- All

- Confirm:
  - **Yes:** Alarm is stopped on the appliance and on the externally connected appliance.
  - No: Alarm is acknowledged on the appliance and remains active on the external appliance until the error is remedied.
- Update (only visible if "Yes" is selected in response to Confirm):
  - Yes: Alarm is recurring according to the set time. (see 5.3.27 Door alarm )
  - No: Alarm is continuously acknowledged.

#### Activating alarm relay

- ► Call up settings menu. (see 5.2 Navigation)
- Swipe left or right until corresponding function is displayed.



#### Fig. 158

- Complete steps (see Fig. 158) .
- ▷ The alarm relay has been set.



If the appliance is in DemoMode all refrigeration functions are deactivated. This is useful for example for demonstrations.

#### Activating DemoMode

- ▶ Call up customer menu. (see 5.2 Navigation)
- Swipe left or right until corresponding function is displayed.

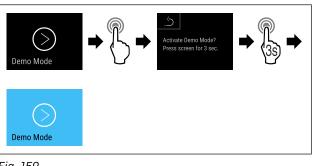


Fig. 159

- ► Complete steps (see Fig. 159).
- ▷ DemoMode is activated.
- $\triangleright$  The status display is shown with a "D" in the top left.

#### Deactivating DemoMode

- Call up customer menu. (see 5.2 Navigation)
- Swipe left or right until corresponding function is displayed.

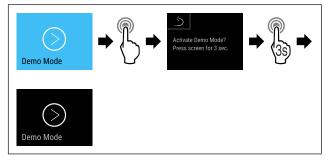


Fig. 161

Complete steps (see Fig. 161) .



Fig. 162 Status display

- $\triangleright$  DemoMode is deactivated.
- $\triangleright$  The status display appears.



This function resets the appliance to the factory settings. All settings made to this point are reset to their original values.

#### Performing factory reset

- ▶ Call up customer menu.
- Swipe left or right until corresponding function is displayed.



Fig. 163

- ► Complete steps (see Fig. 163) .
- $\triangleright$  Factory reset is completed.
- $\triangleright$  Applance restarts.

# 5.4 Message

### 5.4.1 Warnings

Warnings are issued by means of an acoustic signal and visually via a symbol on the display. The signal gets louder until the warning is acknowledged.

Message (red)	Cause	Remedy
Close the door       This message appears if the door is open for too long.         Door open       Here and the second sec		Close the door. Press briefly Alarm is stopped. <b>Note</b> You can set how long it takes for this message to appear (see 5.3.27 Door alarm ) .
Temperature alarm	This message appears if the temperature does not match the set temperature. Reasons for differences in temperature can be: Warm produce for cooling has been placed inside. Too much warm room air flowed in when rearranging and removing food. The power was cut off for a prolonged period.	Press briefly Information about errors and appliance status are displayed. Press briefly Warmest/coldest temperature, date and time are displayed. Press briefly The status screen is displayed. The current temperature and the alarm symbol flash red until the set temperature is reached. Check the quality of the refrigerated goods.

# Controls

Message (red)	Cause	Remedy
Device failure Error	The appliance is faulty, there is an appli- ance error or a component of the appliance has a fault.	Store the cooled produce elsewhere. Press briefly The error code (e.g. BT021) is displayed. Press briefly A further error code is displayed if there is one or Status screen is displayed with flashing error symbol. Swiping or tapping the display will show the error code(s) again. Make a note of error code(s) and contact
	The message indicates that freeze protec- tion mode is active (e.g. due to frequent door openings or loading with goods).	Customer Service. (see 8.3 Customer Service) Press briefly FRZ.PROT is displayed. Press briefly Status screen is displayed with flashing error symbol.
		Swiping or tapping the display will show the message again. After a few hours, the appliance goes back to normal operating mode automatically and the message disappears. Alternatively, prolonged pressing will exit the mode and close the message. If it appears again, contact Customer Service. (see 8.3 Customer Service)
Power failure Power cut	The message appears following an inter- ruption to the electricity supply. The operating panel continues running in battery mode. All functions remain active except for refrigeration and lighting.	Battery's state of charge, information about
* Defrost error Defrost error	The automatic defrosting is not working properly. The previous five defrost cycles were not successful.	Press briefly. Alarm is stopped. Contact Customer Service (see 8.3 Customer Service).
WiFi error WiFi error	Wi-Fi connection is interrupted.	Check connection. Press briefly. Alarm is stopped.
WWW error WWW error, WiFi	This message appears if there is no internet connection via WiFi.	Check connection. Press briefly. Alarm is stopped.

Message (red)	Cause	Remedy	
LAN error	LAN connection is interrupted.	Check connection and network cable. Press briefly. Alarm is stopped.	
This message appears if there is no internet connection via LAN.		Check connection. Press briefly. Alarm is stopped.	
Battery status Battery error	Low appliance battery level (max. 20% remaining).	Reconnect the appliance to a power supply and check whether the battery charge level has increased after 12 hours. Otherwise contact Customer Service (see 8.3 Customer Service) or replace the battery. (see 7.4 Replacing appliance battery)	
		Press briefly. Alarm is stopped.	

## 5.4.2 Reminders

Reminders appear when you are being asked to do something. The are issued by means of an acoustic signal and visually via a symbol on the display. Acknowledge the message by pressing the confirmation button.

Message (yellow)	Cause	Remedy	
	The message appears when the timer for	Press briefly.	
<u> </u>	the set maintenance interval has expired.	Reminder is closed.	
Maintenance		Note	
Maintenance reminder		The maintenance interval can be set (see 5.3.11 Maintenance interval reminder ) .	
n max	This message appears when the tempera-	Press briefly.	
min	ture recording memory (999 hours) is full.	Reminder is closed.	
Min./max. memory		The oldest data is overwritten.	
· · · · · · · · · · · · · · · · · · ·		Note	
Recording reminder		The temperature recording can be reset (see 5.3.4 Temperature recording ) .	
	The message appears if there are more than 10 unconfirmed alarm messages.	Press briefly.	
$\square$		Check messages.	
Alarm history		Reminder is closed.	
Alarm log			
	This message appears if a door which	Close the door	
I M	has been locked electronically is manually	Press briefly.	
Manually opened	opened.	Reminder is closed.	
Manually opened			

# **6** Features

# 6.1 Safety lock

The appliance is fitted with an electronic lock.

Possible functions:

- Locking and unlocking the door lock using the door code. (see 5.3.6 Door lock )
- Activating and deactivating automatic locking of the door. (see 5.3.6 Door lock )
- Operation via remote control. (see 5.3.10 Remote control )

## 6.1.1 Emergency unlocking

In the event of a power failure, the door can be opened using the emergency unlocking key.

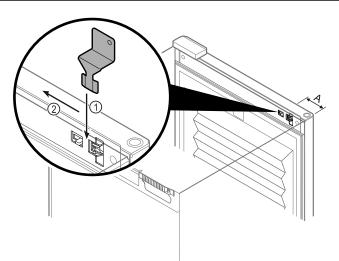


Fig. 164

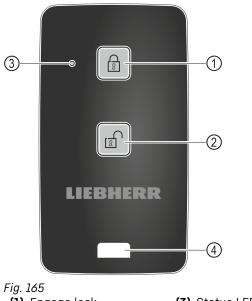
- Position the emergency unlocking key in the location shown Fig. 164 (A) ≈ 100mm.
- Insert the emergency unlocking key from above between the door and the appliance body as far as it will go Fig. 164 (1).
- Drag the emergency unlocking key towards the hinge side Fig. 164 (2).
- $\triangleright$  The lock is unlocked. The door can be opened.

# 6.2 Remote control

The remote control allows the door lock to be engaged and unlocked remotely.

It must be linked to the appliance before use. (see 5.3.10 Remote control )

The battery can be replaced. (see 7.4 Replacing appliance battery)



(1) Engage lock(2) Unlock lock

(3) Status LED(4) Fastening eyelet

## 6.2.1 Using remote control

- Press button Fig. 165 (1) on the remote control.
- $\triangleright$  The lock is engaged. The door cannot be opened.
- Press button *Fig. 165 (2)* on the remote control.
- $\triangleright$  The lock is unlocked. The door can be opened.
- Status LED Fig. 165 (3) provides a visual acknowledgement when you press the button.

► Eyelet *Fig. 165 (4)* for attaching remote control, for example, to a key ring.

## 6.3 Sensors

The appliance can be equipped with the following sensors for temperature monitoring:

- Safety thermostat sensor
- C sensor
- P sensor

#### 6.3.1 Safety thermostat sensor

The safety thermostat sensor monitors the temperature drop and thus protects against excessively low temperatures (Freeze Protect). If the temperature drops below the threshold value, the appliance regulates the temperature automatically. The error message FRZ. PROT (Freeze Protect) (see 5.4 Message) appears.

### 6.3.2 C sensor (control sensor)

The C sensor is permanently installed and regulates the interior temperature of the appliance. You can calibrate the C sensor if necessary. (see 5.3.25 Sensor calibration )

### 6.3.3 P sensor (reference sensor)

The P sensor is permanently installed in the interior, in order to record and monitor the temperature in this location specifically. If the set temperature is exceeded in this location, the sensor triggers an alarm. You can calibrate the P sensor if necessary. (see 5.3.25 Sensor calibration )

# 6.4 Sensor info

This function makes it possible to choose between C sensor or P sensor.

Make sure that the following requirement is met:

P sensor is connected to the appliance. (see 6.5 Interfaces)

### 6.4.1 Selecting C sensor

- ► Call up customer menu.
- Swipe left or right until corresponding function is displayed.

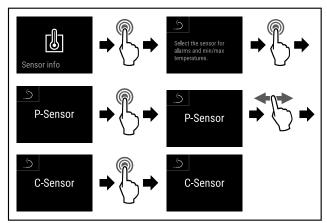


Fig. 166

- Complete steps (see Fig. 166).
- $\triangleright$  C sensor has been selected.

## 6.4.2 Selecting P sensor

- Call up customer menu.
- Swipe left or right until corresponding function is displayed.

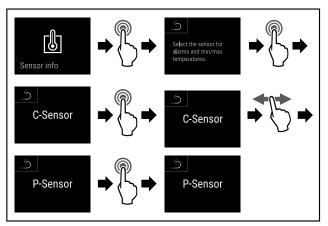
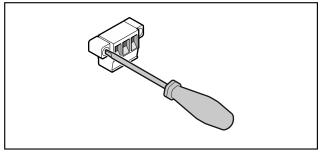


Fig. 167

- Complete steps (see Fig. 167) .
- $\triangleright$  P sensor has been selected.

# 6.5 Interfaces

There are various connection options on the back of the appliance.



#### Fig. 168

#### Note

Screws secure the plugs. To enable disconnection of the plugs, loosen the screws on the left and right.

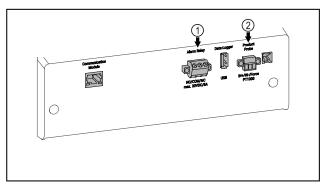


Fig. 169

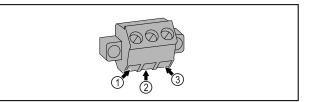
- (1) Potential-free alarm output
- (2) Connection for P sensor

# 6.5.1 Potential-free alarm output



- Risk of injury due to electric shock!
- ► The appliance may only be connected to an external alarm device by trained specialist personnel.

These three contacts can be used to connect a visual or an acoustic alarm device. The connection is designed for a maximum of **30 V (DC) - 8 A** from a safety low voltage source SELV (minimum current **150 mA)**.



#### Fig. 170

- (1) NO (normally open) Connection for indicator lamp, which is active in normal operation or when the appliance is switched off.
- (3) NC (normally closed) Connection for alarm lamp or audible alarms, which is active when an alarm is triggered or there is a lack of power supply.
- (2) COM (common) External voltage source

### 6.5.2 Connection for P sensor

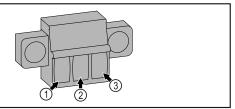


Fig. 171

(1) IN+ (measuring line +)
(2) IN- (common return line -)

(3) FORCE (supply +)

7 Maintenance

# 7.1 Maintenance schedule

Maintenance work is to be performed at regular intervals to ensure proper appliance function.

# 

Danger of injury and damage due to unprofessional maintenance work!

Personal injury and material damage.

Maintenance work may only be performed by trained specialist personnel.



Short-circuit hazard due to live parts!

- Electric shock or damage to the electronics.
- Switch off the appliance.
- Pull out mains plug or switch off fuse.

#### Note

A maintenance reminder function can be activated. (see 5.3.11 Maintenance interval reminder )

#### Note

Liebherr recommends yearly maintenance. For an individual offer, please contact Customer Service (see 8.3 Customer Service).

#### Note

We recommend creating a maintenance log in which all work (repairs, checks) performed is documented.

Component	Activity	Maintenance interval
Sheet metal parts	Check for damage and corrosion. Yearly	
	Replace damaged parts: (see 8.3 Customer Service)	
Door, hinges	Check alignment (see 3.14 Aligning the door) , ease of movement, and tight fit.	Yearly
Lock, door handle	Check for ease of movement and tight fit.	Yearly
Door seal	Check for damage, wear, and tight fit. A replacement door seal is available via Customer Service (see 8.3 Customer Service) .	Yearly
Sensor	Calibrate sensor. (see 5.3.25 Sensor calibration )	Yearly
Sensor feedthrough	Check that the sealing compound is intact.	Yearly
Battery	Replace appliance battery.	5 to 10 years
	A replacement battery is available from customer service. (see 7.4 Replacing appliance battery)	
Surfaces	Cleaning (see 7.3 Cleaning the appliance)	Recommendation: monthly or as required/specified at instal- lation location
Surfaces	Disinfection	Recommendation: monthly or as required/specified at instal- lation location
Installation location, appliance	Decontamination	Recommendation: as required/
	The appliance is suitable for room decontamination with hydrogen peroxide $\rm H_2O_2.$	specified at installation location, maximum 2x per year
	In this context, the values of the following applica- tion specifications must not be exceeded:	
	Concentration: maximum 250 ppm.	
	Humidity: maximum 85%.	
	Maximum permissible room temperature as per climate class. (see 1.4 Range of use of appliance)	
Fan air slots	Cleaning (see 7.3.3 Cleaning fan cover)	Yearly
Alarm relay Sensor	Check plug connections for tight fit.	Yearly
Mains cable	Check for damage.	Yearly
		or
		if there is a change of location
Tilt angle	Check for proper function and tight fit.	Yearly
		or if there is a change of location
Adjusting feet/castors	Check for proper function, damage, and tight fit.	Yearly
	Replace damaged parts. (see 8.3 Customer Service)	

# 7.2 Defrosting appliance

# 

Improper defrosting of the appliance! Injuries and damage.

- Do not use mechanical equipment or other methods to speed up the defrosting process other than those recommended by the manufacturer.
- Do not use electrical heating or steam-cleaning appliances, naked flames or defroster sprays to defrost.
- Do not use sharp objects to remove ice.

Defrosting is performed automatically. The defrost water drains through the opening and evaporates.

To ensure the appliance remains energy efficient, we recommend defrosting it at regular intervals or if there is a large buildup of ice. The main factors causing ice to form inside your appliance are its location (e.g. high humidity), the settings on the appliance and user behaviour.

Manual defrosting:

- Switch off appliance. (see 5.3.2 Switching appliance on and off)
- Pull out mains plug.
- Store refrigerated items elsewhere.
- Leave appliance door open during defrosting process.
- Soak up remaining defrost water with a cloth, clean drain opening and the appliance.

# 7.3 Cleaning the appliance

# 7.3.1 Preparing

# 

Short-circuit hazard due to live parts! Electric shock or damage to the electronics.

Switch off the appliance.
 Pull out mains plug or switch off fuse.

# Risk of fire

Do not damage the refrigeration circuit.

- Empty the appliance.
- Pull out the mains plug.

# 7.3.2 Cleaning housing

## NOTICE

Improper cleaning!

Damage to the appliance.

- Only use soft cleaning cloths and ph-neutral all-purpose cleaners.
- Do not uses abrasive sponges or steel wool which may cause scratches.
- Do not use any sharp or abrasive cleaning agents, nor any that contain sand, chloride or acid.

# Risk of injury and d

Risk of injury and damage as a result of hot steam!Hot steam can lead to burns and can damage the surfaces.Do not use any steam cleaners!

# NOTICE

Risk of damage due to short circuit.

- ▶ When cleaning the appliance, make sure no water gets into the electrical components.
- Wipe the housing down with soft, clean cloth. If very dirty, use lukewarm water with a neutral cleaner. Glass surfaces can also be cleaned with glass cleaner.
- Clean condenser coil each year. If the condenser coil is not cleaned, this significantly reduces the efficiency of the appliance.

# 7.3.3 Cleaning fan cover

## NOTICE

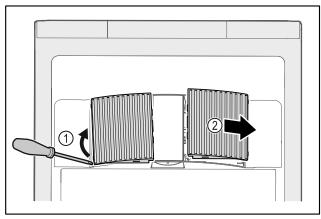
- Risk of damage due to short circuit.
- When cleaning the appliance, make sure no water gets into the electrical components.

### NOTICE

Improper cleaning!

Damage to the appliance.

- Only use soft cleaning cloths and ph-neutral all-purpose cleaners.
- Do not uses abrasive sponges or steel wool which may cause scratches.
- Do not use any sharp or abrasive cleaning agents, nor any that contain sand, chloride or acid.



### Fig. 172

- ► Carefully lever out fan covers from the side *Fig. 172 (1)* and remove towards the front *Fig. 172 (2)*.
- Rinse the air slots of the fan covers under running water. If very dirty, use lukewarm water with a neutral cleaner.
- Leave fan covers to air-dry completely.
- Reattach fan covers to the appliance.

## 7.3.4 Cleaning interior



Short-circuit hazard due to live parts! Electric shock or damage to the electronics.

Switch off the appliance.
 Pull out mains plug or switch off fuse.

# 

Risk of injury and damage as a result of hot steam! Hot steam can lead to burns and can damage the surfaces. ▶ Do not use any steam cleaners!

# Maintenance

#### NOTICE

Improper cleaning!

Damage to the appliance.

- Only use soft cleaning cloths and ph-neutral all-purpose cleaners.
- Do not uses abrasive sponges or steel wool which may cause scratches.
- Do not use any sharp or abrasive cleaning agents, nor any that contain sand, chloride or acid.

#### Note

Defrost water drain (see 1.2 Overview of appliance and equipment) : Remove deposits using a thin material (for example a cotton bud).

#### Note

Do not damage or remove the type plate on the inside of the appliance. The type plate is important for Customer Service. (see 8.3 Customer Service)

- ▶ Open the door.
- Empty the appliance.
- Clean interior and equipment parts with lukewarm water and a little detergent. Do not use any gritty or acidic cleaning agent or any chemical solvent.

### 7.3.5 After cleaning

- ▶ Wipe appliance and equipment parts dry.
- Connect and switch on appliance.
  Once the temperature is sufficiently.
- Once the temperature is sufficiently cold:
- put in items for refrigeration goods.
- Repeat cleaning regularly.
- Clean and dust refrigerators with a heat exchanger (metal grille on the rear of the appliance) once per year.

# 7.4 Replacing appliance battery

In the event of a power failure, the appliance battery is used to record temperature history, alarm and service messages and to show the alarm messages on the display for approximately 12 hours. During initial commissioning, the battery may take up to 24 hours to charge and be in proper working order.

A replacement battery is available from customer service (see 8.3 Customer Service) .

## 7.4.1 Replacing battery



Short-circuit hazard due to live parts! Electric shock or damage to the electronics.

- Switch off the appliance.
- Pull out mains plug or switch off fuse.

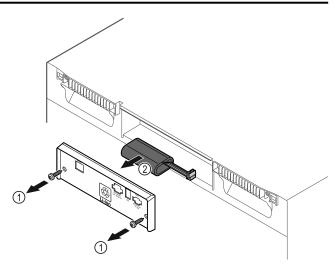


Fig. 173

- Unscrew screws and remove cover from the back of the appliance Fig. 173 (1).
- Disconnect and remove battery Fig. 173 (2).
- ► Install replacement battery.
- Close cover and screw in screws.
- Reconnect mains power cable.

#### Note

The battery must be sent for separate waste treatment for batteries and must be disposed of in an expert and proper manner in accordance with the regulations and laws which apply locally. Do not damage or short circuit the battery!

# 7.5 Replacing the remote control batteries





Fig. 174

The remote control is powered by a 3V CR 2032 battery *Fig. 174 (2)* available from specialist retailers.

## 7.5.1 Replacing battery

- ▶ Undo screw Fig. 174 (1) on the back of the remote control.
- Remove rear.
- ▷ Battery compartment is open.

- Replace battery.
- Close battery compartment.
- Screw back together.

#### Note

► The battery must be sent for separate waste treatment for batteries and must be disposed of in an expert and proper manner in accordance with the regulations and laws which apply locally. **Do not damage or short circuit the battery!** 

Temperature range					
Refrigeration	+5 °C				
Maximum load per shelf <sup>A</sup>					
Appliance wid	Appliance width (see 3.2 Appliance dimensions) Grid shelf Glass shelf Wooden shelf				Wooden shelf
600 mm			45 kg	40 kg	45 kg
750 mm			60 kg	40 kg	60 kg

<sup>A)</sup> Heavier loads may result in a slight bending of the shelves.

Maximum total load and net weight			
Model (see 3.2 Appliance dimensions)	Maximum total load	Net weight	
HMF 4001*	225 kg*	65 kg*	
HMF 4011*	225 kg*	83 kg*	
HMF 5501*	300 kg*	82 kg*	
HMF 5511*	300 kg*	101 kg*	

#### Maximum net capacity

See net capacity on the type plate. (see 1.2 Overview of appliance and equipment)

Lighting	
Energy efficiency class <sup>A</sup>	Light source
This product contains one or more energy efficiency class F light sources	LED

<sup>A)</sup> The appliance may contain light sources with different energy efficiency classes. The lowest energy efficiency class is indicated.

WiFi frequency information		
Frequency band 2.4 GHz		
Maximum radiated power	<100 mW	
Purpose of the wireless equipment	Integration in the local WiFi network for data communication	

Set-up conditions			
Degrees of pollution (surrounding the appliance)	PD2		
Ambient temperature	+10 °C to +35 °C		
Maximum relative ambient moisture	75%, not condensing		
Maximum operating elevation (metres above sea level)	2000 m / 1500 m (glass door)		

Electrical values			
Nominal voltage	220-240 V ~		
Frequency	50 Hz		
Connected load	2,0 A		
Maximum mains fluctuation	+/-10%		
Overvoltage categories	II		

# 8 Customer help

# 8.1 Technical specifications

Data according to DIN 13277				
Model HMFvh	Energy consumption (kWh/ 24h)	Temperature increase – power failure (min.)	Temperature homogeneity (°K)	Temperature consistency (°K)
4001	0.460	95	1.7	1.0
4011	0.741	65	2.7	1.7
5501	0.498	115	1.1	0.9
5511	0.794	65	1.6	1.0

#### Appliance battery

	•
Туре	1S2P/NCR 18650BF
Nominal voltage	3.6 V DC
Capacity	6.7 Ah

# 8.2 Technical fault

Your appliance is designed and built to ensure it works reliably and has a long service life. In the unlikely event that a fault occurs during operation, please check whether the fault is due to an operating error. If this is the case, you will

be charged for the cost incurred even if this falls within the warranty period.

You can fix the following faults yourself.

### 8.2.1 Appliance function

Defect	Cause	Remedy
The appliance is not working.	→ The appliance is not switched on.	<ul> <li>Switch on the appliance.</li> </ul>
	→ The mains plug is not properly plugged into the socket.	Check the mains plug.
	→ There is something wrong with the fuse in the socket.	<ul> <li>Check fuse.</li> </ul>
	→ Power cut	<ul> <li>Keep the appliance closed.</li> <li>The door can be opened using the emergency unlocking key. (see 6.1 Safety lock).</li> <li>If necessary move the refrigerated/frozen items to another fridge or freezer if the power is off for a prolonged period.</li> </ul>
	→ The appliance plug is not properly inserted in the appliance.	<ul> <li>Check appliance plug.</li> </ul>
Temperature is not cold enough.	→ The appliance door is not closed properly.	<ul> <li>Close appliance door.</li> </ul>
	$\rightarrow$ Ventilation is not sufficient.	<ul> <li>Clear ventilation grille and clean it.</li> </ul>
	→ The ambient temperature is too high.	<ul> <li>Ensure the correct ambient conditions: (see 1.4 Range of use of appliance)</li> </ul>
	→ The appliance was opened too many times or for too long.	<ul> <li>Wait to see if the required temperature corrects itself. If not, contact Customer Service (see 8.3 Customer Service).</li> </ul>
	$\rightarrow$ The temperature is set incorrectly.	Set a colder temperature and check after 24 hours.
	→ The appliance is too close to a heat source (oven, radiator, etc).	<ul> <li>Change where the appliance or the heat source are located.</li> </ul>
Remote control is not working.	→ The remote control battery is empty.	<ul> <li>Replace battery.</li> </ul>
-	→ The radio connection with the appliance is too weak.	Reduce the distance to the appliance.
	→ Remote control not paired.	Pair remote control again: (see 5.3.10 Remote control )
	→ Remote control is faulty.	• Contact customer service (see 8.3 Customer Service) .

# 8.3 Customer Service

First check whether you can remedy the fault yourself . If this is not the case, please contact Customer Service.

Please refer to the enclosed "Liebherr-Service" brochure for the address.

# 

Unprofessional repair! Injuries.

- Have any repairs and action not expressly specified on the appliance and mains cable carried out by service personnel only. (see 7 Maintenance)
- A damaged mains cable may only be replaced by the manufacturer, the manufacturer's Customer Service or a similarly qualified person.
- In the case of appliances with an IEC connector, the change may be made by the customer.

## 8.3.1 Contacting Customer Service

Make sure you have the following appliance data at the ready:

Appliance name (model and index)

- Service no. (Service)
- Serial no. (S no.)
- ► Access the appliance information via the display (see 5.3.20 Info).

-or-

- Refer to the type plate for appliance information. (see 8.4 Type plate)
- ▶ Note down appliance information.
- Inform Customer Service: Report faults and the appliance information.
- $\triangleright$  This will help us to provide a fast and focussed service.
- Follow any further instructions provided by Customer Service.

# 8.4 Type plate

The type plate is inside the appliance. See appliance overview.

(3) Serial No.

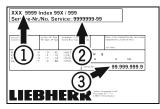


Fig. 175

(1) Appliance designation

(2) Service No.

# 9 Shutting down

- Empty the appliance.
- Switch off the appliance.
- Pull out the mains plug.
- Remove appliance connector if required: remove and at the same time move from left to right.
- Clean appliance (see 7.3 Cleaning the appliance).
- Leave the door open so that no bad odours form.

#### Note

- Damage to the appliance and malfunctions!
- After shutting down, only store the appliance at the permitted room temperature of between -10 °C and +50 °C.

# 10 Disposal

# 10.1 Preparing appliance for disposal



Liebherr uses batteries in some of its appliances. In the EU, for environmental reasons, legislation obliges the end user to remove these batteries before disposing of old appliances. If your appliance contains batteries, a corresponding notice is attached.

Lamps

If you can remove the lamps yourself without destroying them, also remove these before disposal.

► Take the appliance out of operation.

LI-lon

- Appliances with batteries: remove the batteries. For description, see Maintenance chapter.
- ▶ If possible: remove lamps without destroying them.

# **10.2** Disposing of the appliance in an environmentally friendly manner



The appliance still contains valuable materials and must be disposed of separately from unsorted municipal waste.

Dispose of batteries separately from the old appliance. To do this, you can return the batteries free of charge to retailers as well as recycling centres and collection centres for recyclable materials.

of removed

via the respective collection

lamps

Lamps

For Germany:

You can dispose of the appliance free of charge via the class 1 collection containers at the local recycling and recyclable material collection centres. When purchasing a new fridge/freezer, if the sales area > 400 m<sup>2</sup>, retailers will also take back the old appliance free of charge.

# 

Leaking coolant and oil!

Fire. The coolant contained in the appliance is eco-friendly, but also flammable. The oil contained in the appliance is flammable. Escaping coolant and oil can ignite if the concentration is high enough and in contact with an external heat source.

Dispose

systems.

- Do not damage the pipelines of the coolant circuit and the compressor.
- ▶ Transport the appliance without damaging it.
- Dispose of batteries, lamps and the appliance according to the above specifications.

# 11 Additional information

Further information on warranty conditions can be found in the enclosed service brochure or on the Internet at https://home.liebherr.com.

# If appliance malfunctions, inform:

Quick Start Guide for everyday use

## Information about using this Quick Start Guide:

- This Quick Start Guide is not a substitute for the full operating instructions nor is it a substitute for appliance training.
- This Quick Start Guide provides support for everyday use and handling the appliance.
- Read the full operating instructions and the safety notes contained therein.

This quick start guide is for: HMFvh 40../55..



Scanning the QR code will open the full operating instructions:



#### Intended use

This medical refrigerator is suitable for professional storage of products at a temperature of 5  $^{\circ}\mathrm{C}.$ 

#### Foreseeable incorrect use

Do not use the appliance for the following applications:

#### - Storage and refrigeration of:

- Chemically unstable, flammable or corrosive substances
- Blood, plasma or other body fluids for the purpose of infusion, application or introduction in the human body
- Use in potentially explosive atmospheres
- Use outdoors or in areas exposed to dampness and splashing water

#### When stocking, observe the following points:

- Position grid shelves according to the height required.
- Observe maximum load.
- When the storage temperature has been reached, load the appliance (compliance with cold chain).
- Keep the ventilation slots of the recirculation fan free in the interior.
- Produce for cooling must not come into contact with the evaporator on the rear wall.
- Keep liquids in closed containers.
- Leave space when storing refrigerated goods to ensure good air circulation.

# Status display



Fig. 176

Actual temperature
 Alarm status

(3) Defrosting status(4) Door lock status

Model ID / Inventory number:

# Navigation with the touch display

Navigation	Description	
	Swipe right or left	
5	Navigates within the menu.	
	Press briefly	
1 M	Activates/deactivates function.	
	Confirms selection.	
	Opens submenu.	
6	Long press (3 seconds)	
(36)	Activates/deactivates function.	
	Brief press of Back symbol	
Back	Jumps back one level.	

## Displaying temperature recording

The temperature recording displays the length of the recording and the minimum and maximum temperatures measured during this period of time.

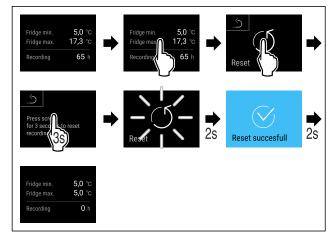
 Swipe left or right until corresponding function is displayed.



Fig. 177

# **Resetting temperature recording**

Swipe left or right until corresponding function is displayed.





• Carry out steps according to the illustration.

# Quick Start Guide for everyday use

# Unlocking door lock with door PIN

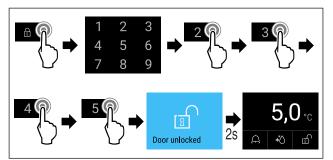


Fig. 179 Example shows PIN 2345

• Carry out steps according to the illustration.

# Displaying alarm log

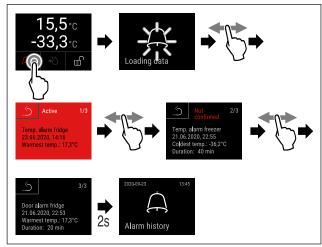


Fig. 182 Example shows an active alarm, an unconfirmed alarm, and a confirmed alarm.

- ► Carry out steps according to the illustration.
- Alarm log shows active, confirmed or unconfirmed alarms (maximum 10 alarms).
- $\triangleright$  To delete the alarm log: See operating instructions.

# **Cleaning appliance**

- Empty the appliance.
- Pull out the mains plug.
- Observe the information in the operating instructions.
- Dry the appliance and equipment thoroughly after cleaning.
- Connect the appliance.
- Switch on the appliance.
- ► Load the appliance once the storage temperature is reached.

# What should I do if there is a fault?

A message appears in the display if there is a fault. Messages have different meanings:

Symbol colour in the display	Meaning	Remedy
YELLOW	Reminder of general procedures. You can carry out these procedures to eliminate the message.	Consult the operating instructions and perform the troubleshooting steps.
RED	Warning Appears when there are malfunctions. You can eliminate simple malfunctions yourself.	Consult the operating instructions and perform the troubleshooting steps.

If you cannot remedy the fault yourself, contact a competent member of staff or your nearest customer service outlet.

Cut out the page



home.liebherr.com/fridge-manuals



Refrigerator ORIGINAL OPERATOR'S MANUAL

Issue date: 20230630

Part number index: 7080658-00

Liebherr Hausgeräte Lienz GmbH Dr.-Hans-Liebherr-Strasse 1 A-9900 Lienz Österreich