

Technical Manual

IKE 458-4-4T

Service Manual: H8-03-02

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Contents

1. Safety	4
2. General	5
2.1 Installation and connection	5
2.2 The differences from the previous model with the electromechanical timer are: ..	5
3. Technical manual	6
3.1 General structure of the appliance	6
3.2 Air circulation	7
3.3 Components	8
3.4 Description of the individual components	8
4. Control panel	10
4.1 Electronics	11
4.2 Freezer section ERF 2000 electronic unit	11
4.3 Electronics for refrigerator ERF2020	14
5. Functioning	17
5.1 Normal (freezer section)	17
5.2 Defrosting (freezer section)	17
5.3 Ventilator for the battery-operated evaporator	18
5.4 Superfrost function	18
5.5 Supercool function (refrigerator section)	18
5.6 Malfunctioning of the freezer air temperature probe	18
5.7 Malfunctioning of the refrigerator air temperature probe	19
5.8 NTC sensor characteristics	20
6. Access to the individual components	21
6.1 Freezer section	21
6.2 Replacing the flap thermostat	22
6.3 Defrost resistor	22
7. Customer service program – freezer section	23
7.1 Start of the customer service program	23
7.2 Acknowledge the customer service program	23
7.3 Functions of the customer service program	23
8. Alarm indication	25
8.1 Alarm freezer temperature	25
8.2 Alarm freezer section door open	25
9. Installation instructions	26
9.1 Adjusting the height	26
9.2 Mounting the side panels	26
9.3 Installation of the doors	27
9.4 Installing the appliance	29
9.5 Attaching the base	29
10. Circuit diagram IKE 458-4-4T	31

1. Safety



Danger!

Repairs may only be carried out by a qualified electrician! Inexpert repairs may lead to danger and injury to the user!

To prevent electric shocks, please observe the following instructions:

- In the event of a fault, housing and frame may be live!
- Touching live components inside the appliance may cause dangerous currents to flow through your body!
- Prior to repairs, disconnect the appliance from the mains!
- When inspecting live parts, a residual current operated device must be used at all times!
- The ground wire resistance must not exceed that specified in the standard! It is of vital importance for ensuring the safety of people and the functioning of the appliance.
- On completion of repairs, an inspection must be carried out in accordance with VDE 0701 [Association of German Electrical Engineers] or the corresponding regulations for your country!



Caution!

Make sure you observe the following instructions:

- The appliances must be disconnected from the mains prior to all repairs. If inspections need to be carried out on live appliances, make sure you use a residual current operated device.



Sharp edges: Use protective gloves.



Components may be electrostatic!
Observe handling precautions!

2. General

This manual describes electronic refrigerators with four doors. This series is equipped with electronic control elements instead of electromechanical thermostats. There is no electromechanical timer because the electronics with the designation ERF2000 have an integrated electronic timer.

2.1 Installation and connection

Dry, well ventilated rooms present the best conditions for installing the fridge-freezers. In order to keep electricity consumption low, the appliances should not be installed next to a cooker or a radiator. Avoid direct sunlight.

When installed in a kitchen, fridge-freezers are arranged to fit in with normal work routines. It must be ensured that the direction in which the door opens is the right one for the type of work carried out in the kitchen.

The sign indicating the limits appears on the rating label. The fridge-freezers used in Germany almost all belong to class "N", i.e. avoid installing them in a room where a temperature of less than +16 °C or more than +32 °C can be reached as the temperature regulator of the appliances will then fail to function correctly. This has particularly adverse effects in refrigerators with an evaporator compartment and in fridge-freezers with only one cooling circuit.

On no account should the appliance be installed in a place where the temperatures exceed +32 °C. Fridge-freezers are supplied ready to plug in and are connected to an earthed socket. The rating is between approx. 145 W and 265 W.

2.2 The differences from the previous model with the electromechanical timer are:

Temperature control

Electro-mechanical with 4 doors: electro-mechanical thermostats
Electronic with 4 doors: ERF2000 electronics (freezer) and ERF2020 electronics (fridge)

Cooling circuit

Electro-mechanical with 4 doors: horizontal condenser (in the compressor area) with drop collector
Electronic with 4 doors: only vertical condenser

Defrosting

Electromechanical with 4 doors: electromechanical timer
Electronic with 4 doors: ERF2000 electronics (freezer)

Temperature switch

Electromechanical with 4 doors: 1 temperature protection switch for the end of defrosting (+10 °C)
 1 temperature protection switch (+40 °C)
Electronic with 4 doors: 2 safety temperature switches (+40°C)

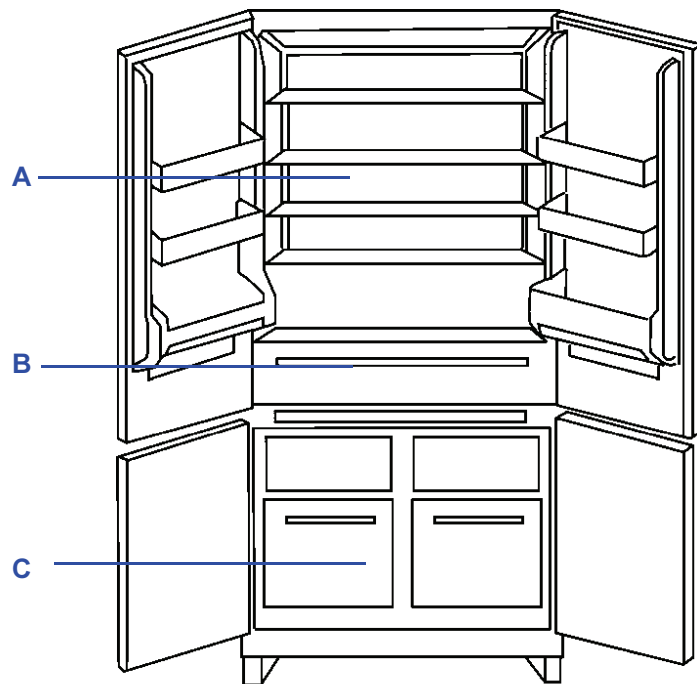
3. Technical manual

3.1 General structure of the appliance

The electronic operating elements of the device are found inside the central transverse support. The fridge with 4 doors has 3 refrigeration zones available so that every type of food can be stored optimally.

The appliance is equipped with two compressors and has two separate cooling circuits:

- 1 View of the refrigeration section
- 2 Cooling circuit of the zero-degree zone and the freezer section.



- A Refrigerator section
- B Zero-degree zone
- C Freezer section

A – Refrigerator section

Thanks to the natural air circulation in the refrigerator section, the temperature and humidity values required for correct storage of fresh foodstuff can be guaranteed.

The ERF 2020 electronics located on the right-hand side of the operating panel controls the temperature (these electronics form a single component because the functional electronics and the display electronics are connected by means of a soldered ribbon cable).

B – Zero-degree zone

This refrigeration zone is maintained at an even temperature of between 0 °C and +3 °C. Refrigeration is provided by means of forced air convection from the freezer section below.

The temperature control is regulated by means of a special flap thermostat opening and closing the opening for the air from the freezer section.

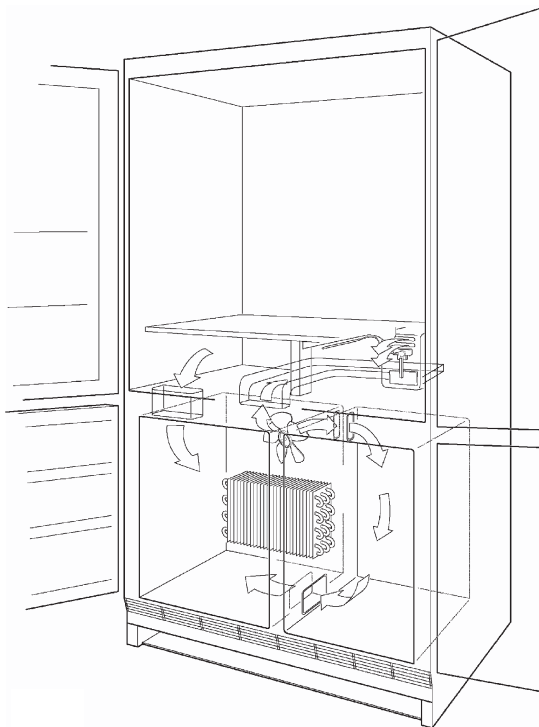
C – Freezer section

The cold air is generated by a battery-operated evaporator, while the forced circulation of the air is affected by means of a ventilator. This means that moist air in the form of frost only condenses on the evaporator and not on the freezer walls or on food packages.

A timer activates a defrost resistor at regular intervals (approx. every 14 hours) melting any collected frost.

The ERF2000 electronics located on the right-hand side of the operating panel control the temperature (these electronics consist of two parts because the functional electronics and the display electronics are connected by means of a plug-connected ribbon cable).

3.2 Air circulation



Freezer section

The cold air produced by the battery-operated evaporator is circulated by the ventilator located above the battery. The air flows into the right-hand compartment within the freezer and flows out again through two slits. The temperature is controlled by the thermostat bulb which can be seen installed immediately above the battery.

Zero-degree zone

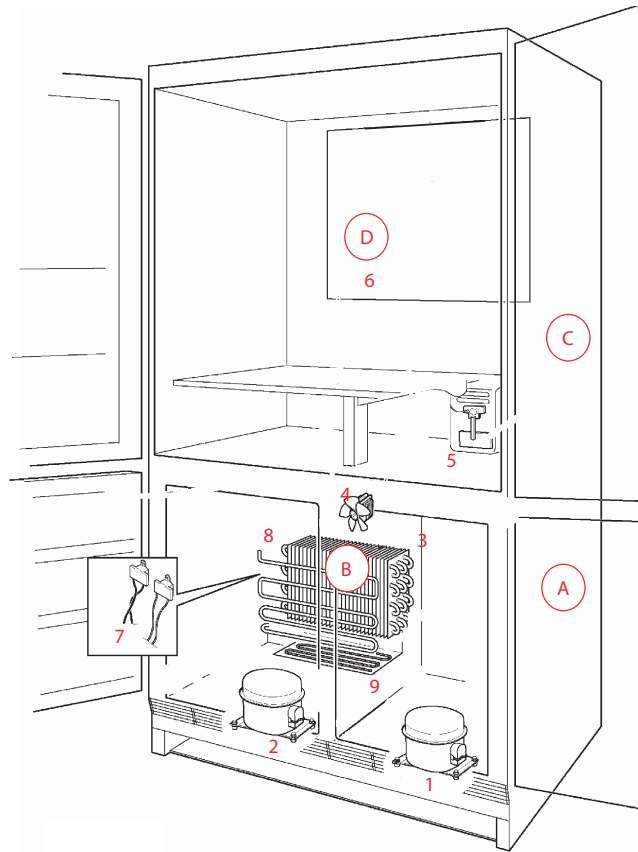
The air flows in through a foam-mounted channel above the fan and flows out through the slits on the flap thermostat. The air can flow back into the freezer section through a slit on the bottom left of the zero-degree zone. The temperature is regulated by the flap thermostat.

Refrigerator section

The air is circulated by means of natural air convection.

3.3 Components

1. Refrigerator section compressor
 2. Freezer compressor
 3. Battery-operated evaporator
 4. Ventilator for the battery-operated evaporator
 5. Flap thermostat (only for some models)
 6. Flush-mounted refrigerator evaporator
 7. Thermal protection device
 8. Defroster resistor
 9. Condensation water channel resistor
- D.A.C. (only for some models).
- A. NTC probe of the freezer
 - B. NTC probe of the battery-operated evaporator
 - C. NTC probe of the refrigerator
 - D. NTC probe of the battery-operator refrigerator evaporator



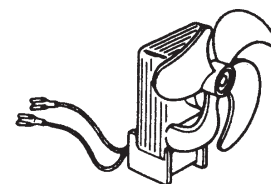
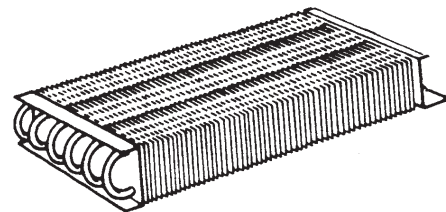
NOTE! The probes A, B and C have been foam-mounted and hence cannot be replaced.

3.4 Description of the individual components

Battery-operated evaporator and ventilator

The battery-operated evaporator cools extremely well in spite of the fact that it takes up little space. This is made possible because the evaporator surface has been enlarged by numerous aluminium ribs inserted into a zinc serpentine tube.

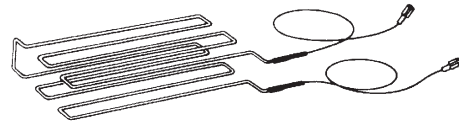
Active air circulation, generated by a ventilator (power output: 3.1 W, speed: 2400 rpm) installed above the evaporator ensures that all of the humidity present is deposited on the evaporator which is the coldest part within the interior of the appliance.



Defrost resistor

The ice which builds up on the evaporator needs to be defrosted at regular intervals.

To do this, approx. every 14 hours, the freezer electronics switch on a resistor (303 Ohm; 240 V) consuming 190 W which is in direct contact with the battery.



Condensation water channel resistor

In order to prevent condensation water from turning into ice, a 21.5 W resistor (resistance: 2679 Ohm, voltage: 240 V) is installed beneath the condensation water channel.

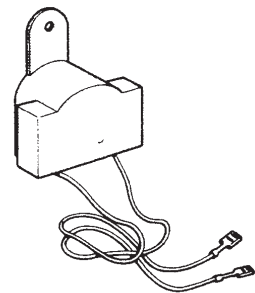
This resistor is connected in parallel with the defrost resistor.



Overheating protection switch

Two identical overheating protection switches in direct contact with the battery cut off the power supply to the defrost resistor if +40 °C is reached

(Cable colour: black).



Rubber valve

The condensation water is drained off through a silicone plastic valve located in the condensation water drainage hole. Thanks to the characteristics of this valve, the condensation water can drain freely.

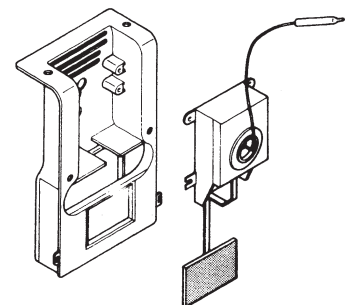
During the cooling phase, however, the valve closes due to the underpressure which is produced inside the appliance, hence preventing moist air from the outside being sucked in.



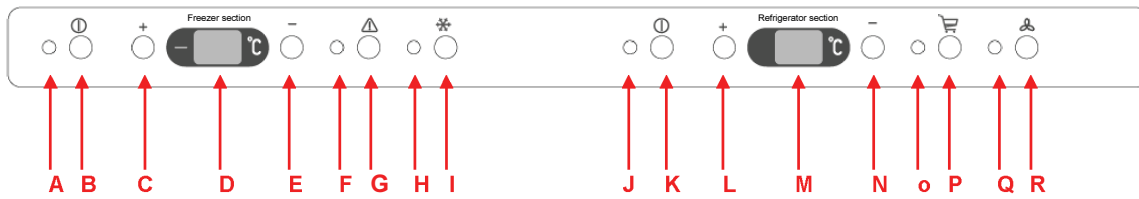
Flap thermostat (only for some models!)

In the rear part of the zero-degree zone, the flap thermostat is located inside a transparent protective housing. The thermostat opens or closes the opening through which the air coming from the freezer section flows.

Position min.	Position max.
+2.5 °C	-3.5 °C



4. Control panel



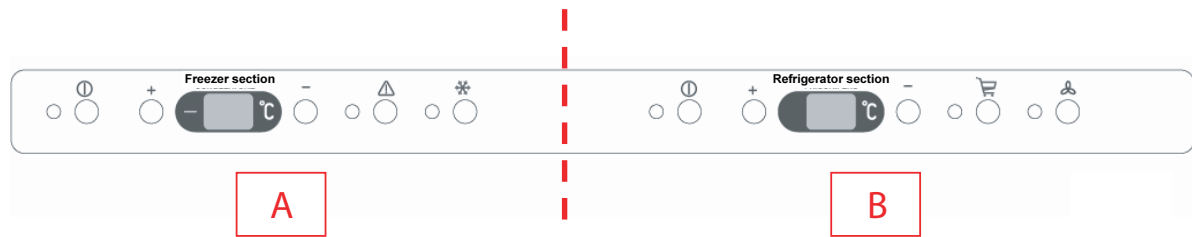
Freezer section key

- A. ON/OFF control lamp
- B. ON/OFF button of the freezer section
- C. Button to raise the temperature (+)
- D. Temperature display in the freezer section
- E. Button to decrease the temperature (-)
- F. Alarm lamp
- G. Button for switching off the alarm
- H. Superfrost function control lamp
- I. Button for the Superfrost function

Refrigerator section key

- J. ON/OFF control lamp
- K. ON/OFF button of the refrigerator section
- L. Button to raise the temperature (+)
- M. Display of the refrigerator section temperature
- N. Button to decrease the temperature (-)
- O. Supercool control lamp
- P. Button for the supercool function
- Q. D.A.C. control lamp (only for some models!)
- R. Button for the D.A.C. function (only for some models)

4.1 Electronics



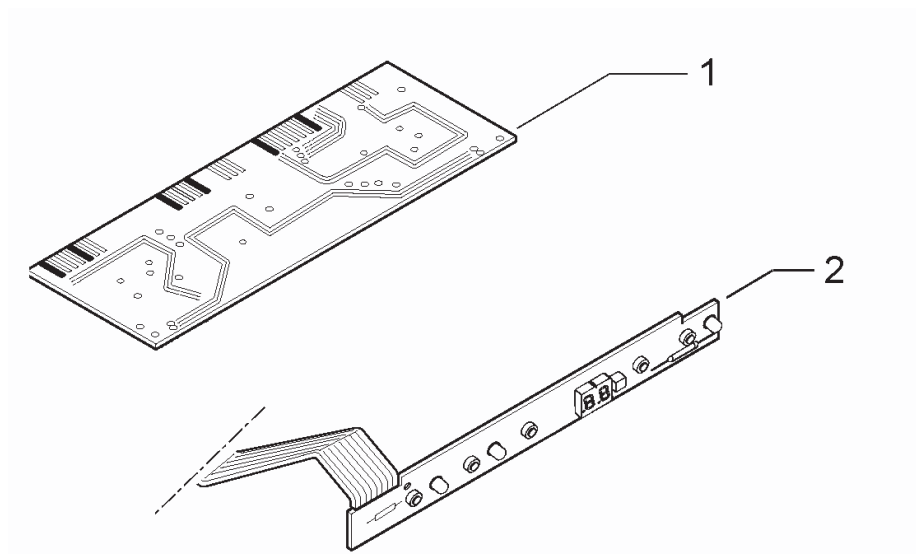
The appliance is controlled by two independent electronic systems:

- A. Electronic system of freezer section
- B. Electronic system of refrigerator section

4.2 Freezer section ERF2000 electronic unit

The freezer section electronics are type ERF2000 and comprise:

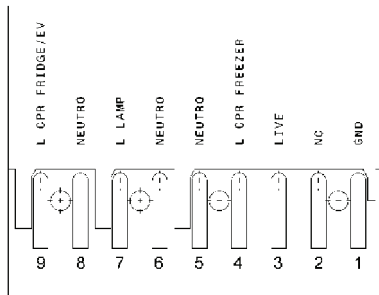
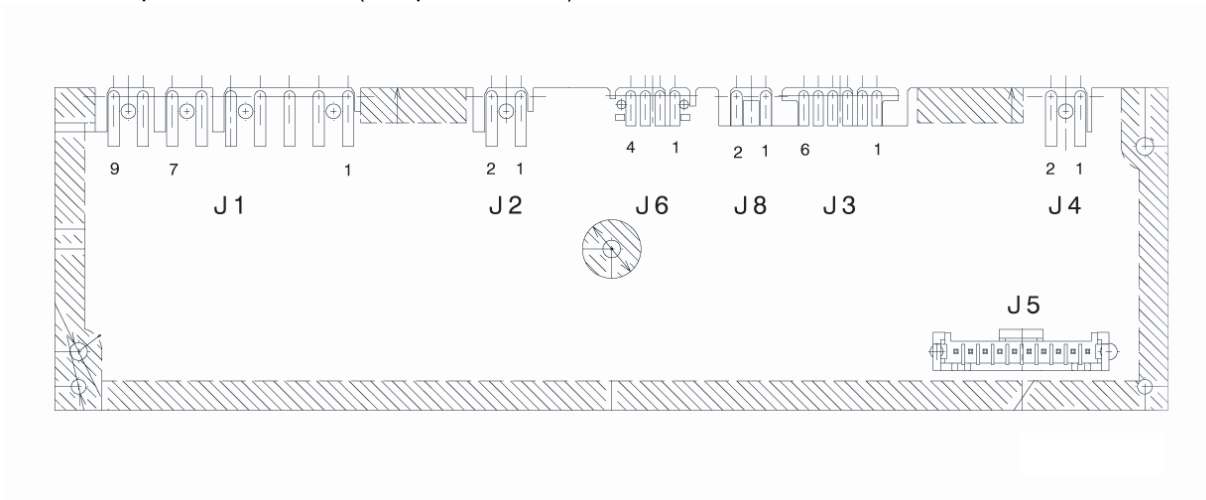
- 1. Power electronics
- 2. Display electronics



The two electronic systems are connected by a ribbon cable with plug connectors and therefore they are available individually as replacement parts.

4.2.1 Power electronics (freezer section)

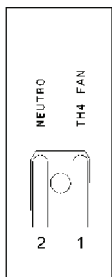
View of the power electronics (components side):



J1

ca00*172

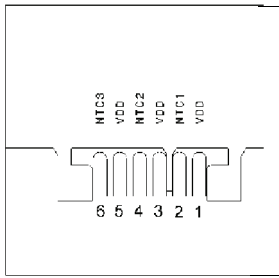
1. Earth contact
2. Not used
3. Cable
4. Freezer section compressor
5. Neutral wire
6. Not used
7. Not used
8. Neutral wire
9. Defrost resistor



J2

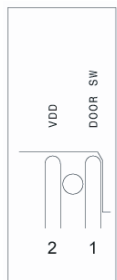
ca00*173

1. Ventilator for the battery-operated evaporator
2. Not used



J3

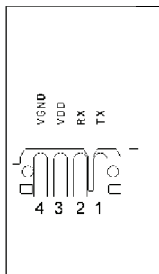
1. Not used
2. Not used
3. Evaporator probe (black cable)
4. Evaporator probe (black cable)
5. Freezer probe (brown cable)
6. Freezer probe (brown cable)



J4

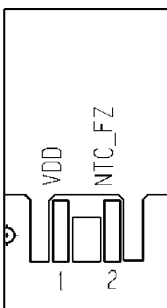
1. Freezer section door switch
2. Freezer section door switch

cd001175



J6

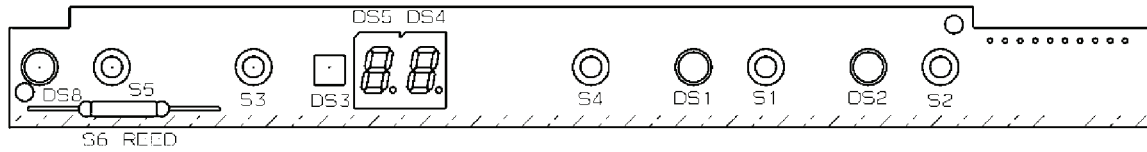
1. Not used
2. Not used
3. Not used
4. Not used



J8

1. Not used
2. Not used

4.2.2 Display electronics for freezer section

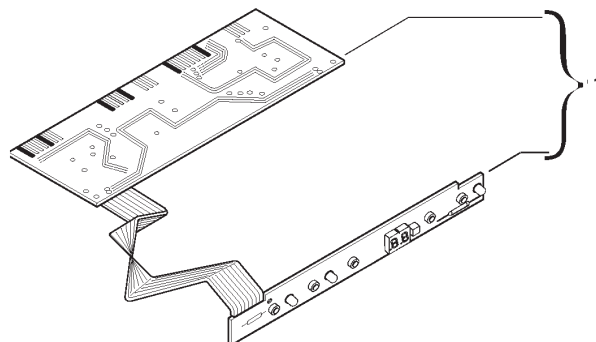


Key

- S1 = Button to switch off the alarm
- S2 = Button for the superfrost function
- S3 = Button to raise the temperature (+)
- S4 = Button to decrease the temperature (-)
- S5 = ON/OFF button for freezer
- S6 = Reed element (optional)
- DS1 = Alarm control lamp
- DS2 = Control lamp for the superfrost function
- DS3 = Symbol (-)
- DS4 = Display
- DS5 = Display
- DS8 = ON/OFF control lamp

4.3 Electronics for refrigerator ERF2020

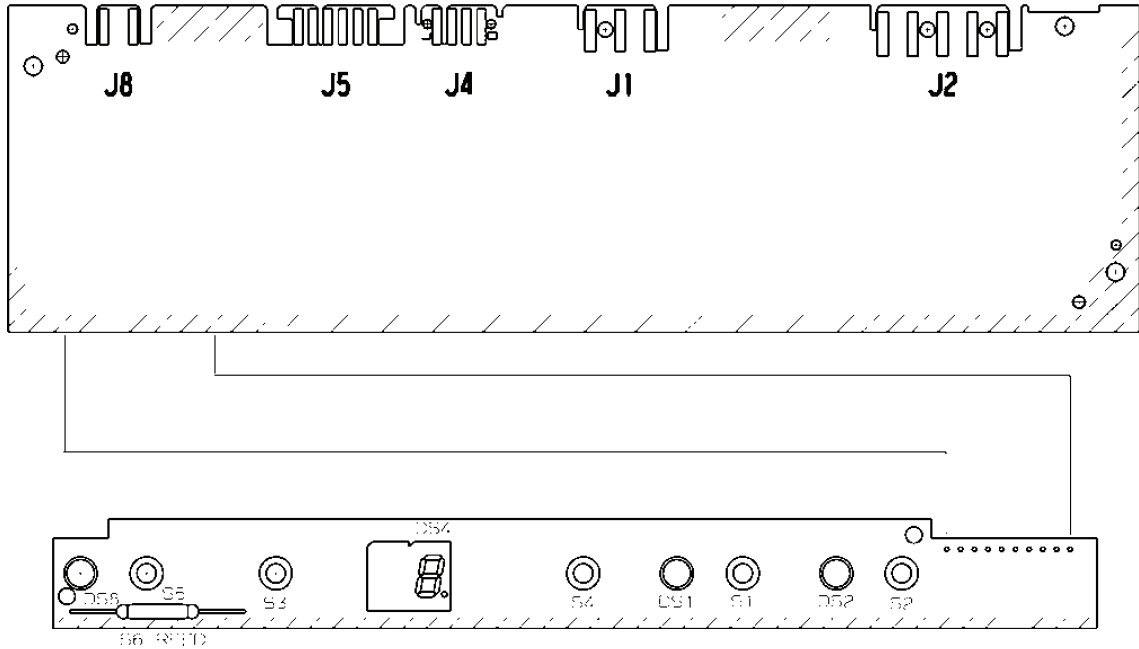
The refrigerator electronics are type ERF2020 and consist of power electronics and display electronics (1).



The power electronics and display electronics are connected by means of a soldered on ribbon cable. For this reason only one RP no. 432502 is provided for both electronic systems.

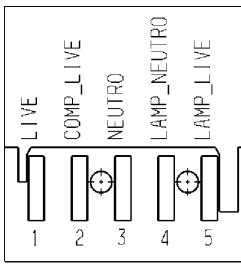
4.3.1 Power electronics and display electronics (refrigerator)

View of the power electronics (welded side):



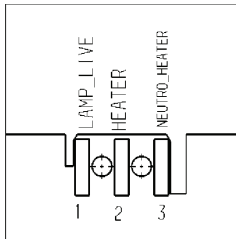
Key

- S1 = Button for the supercool function
- S2 = Button for the D.A.C. function (only for some models!)
- S3 = Button to raise the temperature (+)
- S4 = Button to decrease the temperature (-)
- S5 = ON/OFF button for the refrigerator section
- S6 = Reed element (optional)
- DS1 = Supercool control lamp
- DS2 = D.A.C. control lamp (only for some models!)
- DS4 = Display
- DS8 = ON/OFF control lamp



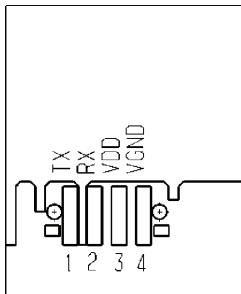
J2

1. Cable
2. Compressor of the refrigerator section
3. Neutral wire
4. Lamp
5. Neutral wire



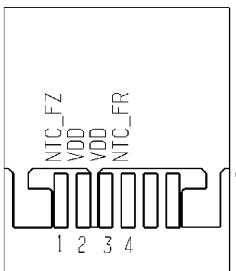
J1

1. Not used
2. D.A.C. fan (only for some models).
3. Neutral wire



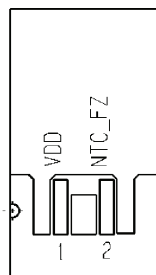
J4

1. Not used
2. Not used
3. Not used
4. Not used



J5

1. Refrigerator section probe (white cable)
2. Refrigerator section probe (white cable)
3. Evaporator probe (black cable)
4. Evaporator probe (black cable)




J8

1. Not used
2. Not used

5. Functioning

5.1 Normal (freezer section)

 **The electronics are supplied with a 220-240 V / 50 Hz voltage, even when the appliance is switched off (OFF). Before the electronics are handled, therefore, the mains supply plug must be disconnected.**

Thanks to the air circulation, any humidity in the freezer section is collected on the evaporator battery and this prevents the formation of frost on the foodstuff.

During the normal operating time, the ERF 2000 electronics of the freezer supply the freezer compressor and battery-operated evaporator ventilator.

The ventilator is switched on and off with a delay of 2 minutes after the compressor.

The operating time, which corresponds to the period between two subsequent defrosting periods, is, if the doors are opened, normally approx. 14 hours (if the door is never opened it can extend up to 71 hours!)

5.2 Defrosting (freezer section)

All humidity present inside the appliance will collect on the evaporator, the coldest part in the freezer. For this reason the ice forming on the battery must be melted at regular intervals, when the door is opened normally approx. every 14 hours (if the door is never opened, it is sufficient to do it after 71 hours).

The electronics will switch off the electric circuit supplying the battery-operated evaporator and will supply the defrost resistors for a period of at least 20 minutes.

The heat generated by the defroster heating element has no influence on the temperature in the freezer or on that of the food packages since the total thermal energy is consumed for melting the ice on the evaporator.

After 20 minutes, the electronics will measure the temperature of the battery-operated evaporator and will interrupt the supply to the defrost resistors if +10 °C has been reached.

The electronics will then restart the compressor after a 5 minute delay. After a further 2 minute delay, when the air is already cold, the ventilator will also be switched on again.

If the electronics fail to interrupt the supply to the defrost resistors and the battery temperature rises to +40 °C, the resistors will be switched off by safety temperature switches

If half an hour after the start of the melting process the temperature switch has not switched off the defrost resistors, the electronics will deactivate them in any case and continue with normal operation.

5.3 Ventilator for the battery-operated evaporator

As long as the freezer doors are not opened, the ventilator of the battery-operated evaporator will run for as long as the compressor is running (when the compressor is switched off the ventilator will be deactivated after a 2 minute delay).

If the ventilator of the battery-operated evaporator is running and one of the two freezer doors is opened, the ventilator will be switched off (it will be reactivated when the doors have been closed again).

If the ventilator of the battery-operated evaporator is not running and one of the two freezer doors is opened, the ventilator will be switched on for 2 minutes when the door has been closed again.

5.4 Superfrost function

The superfrost function is activated by pressing button "I". The control lamp *H* will glow and on the display the message *SP* will appear. The compressor runs for approx. 52 hours without interruption and will then be automatically switched off.

For deactivating this function early, press button "I" again .

5.5 Supercool function (refrigerator section)

The supercool function can be used to cool large quantities of food in the refrigerator quickly, e.g. for drinks or salads for a party.

The supercool function is activated by pressing the button *P*. The control lamp *O* will glow and the superfrost function will now ensure intensive cooling and the compressor will run for approx. 6 hours in the thermostatic mode and not in the continuous operation mode (as if the temperature dial had been turned to the max position in order to achieve approx. +2 °C) and then it will switch off automatically; the D.A.C. ventilator is switched on (if available), however, the control lamp associated with the D.A.C. function will not glow.

For deactivating this function early, press button *P* again.

5.6 Malfunctioning of the freezer air temperature probe

Should the NTC temperature probe malfunction during normal operation (i.e. the signal from the probe falls outside the limiting values), then:

- The appliance will follow a predetermined programme sequence during which the freezer compressor is alternately supplied for 40 minutes and then switched off for 40 minutes;
- The display will show one of the following symbols:

Freezer air temperature probe defective



Temperature probe of the battery-operated evaporator of the freezer section defective



Once the probe functions again properly the two operating modes described above will be terminated.

5.7 Malfunctioning of the refrigerator air temperature probe

Should the NTC temperature probe malfunction during normal operation (i.e. the signal from the probe falls outside the limiting values), then:

- The appliance will follow a predetermined programme sequence during which the refrigerator compressor is alternately supplied for 30 minutes and then switched off for 40 minutes;
- The display will show one of the following symbols:

Refrigerator section air temperature probe defective



Battery-operated evaporator temperature probe of the refrigerator section defective

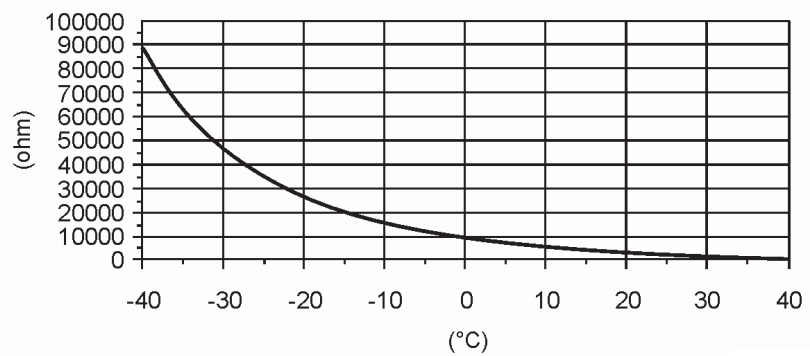


Once the probe functions again properly, the two operating modes described above will be terminated.

5.8 NTC sensor characteristics

Conversion table

T (°C)	$\Delta T (\pm ^\circ C)$	Rn (Ω)
10	± 0.6	5337
9	± 0.6	5600
8	± 0.5	5877
7	± 0.5	6171
6	± 0.5	6481
5	± 0.5	6809
4	± 0.5	7156
3	± 0.5	7523
2	± 0.4	7911
1	± 0.4	8322
0	± 0.4	8758
-1	± 0.4	9218
-2	± 0.4	9705
-3	± 0.4	10222
-4	± 0.5	10770
-5	± 0.5	11352
-6	± 0.5	11969
-7	± 0.5	12624
-8	± 0.5	13320
-9	± 0.5	14059
-10	± 0.5	14845
-11	± 0.5	15678
-12	± 0.6	16564
-13	± 0.6	17506
-14	± 0.6	18509
-15	± 0.6	19577
-16	± 0.6	20715
-17	± 0.6	21928
-18	± 0.6	23221
-19	± 0.6	24600
-20	± 0.6	26072
-21	± 0.7	27637
-22	± 0.7	29307
-23	± 0.7	31092
-24	± 0.7	32999
-25	± 0.7	35039
-26	± 0.7	37221
-27	± 0.7	39556
-28	± 0.7	42056
-29	± 0.8	44735
-30	± 0.8	47606
-31	± 0.8	50668
-32	± 0.8	53952
-33	± 0.8	57475
-34	± 0.8	61258
-35	± 0.8	65320
-36	± 0.8	69686
-37	± 0.8	74381
-38	± 0.8	79431
-39	± 0.9	84867
-40	± 0.9	90721

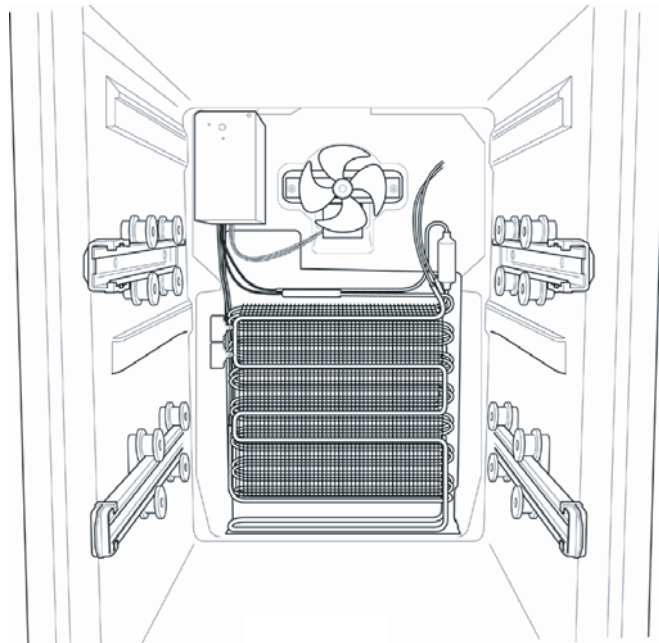
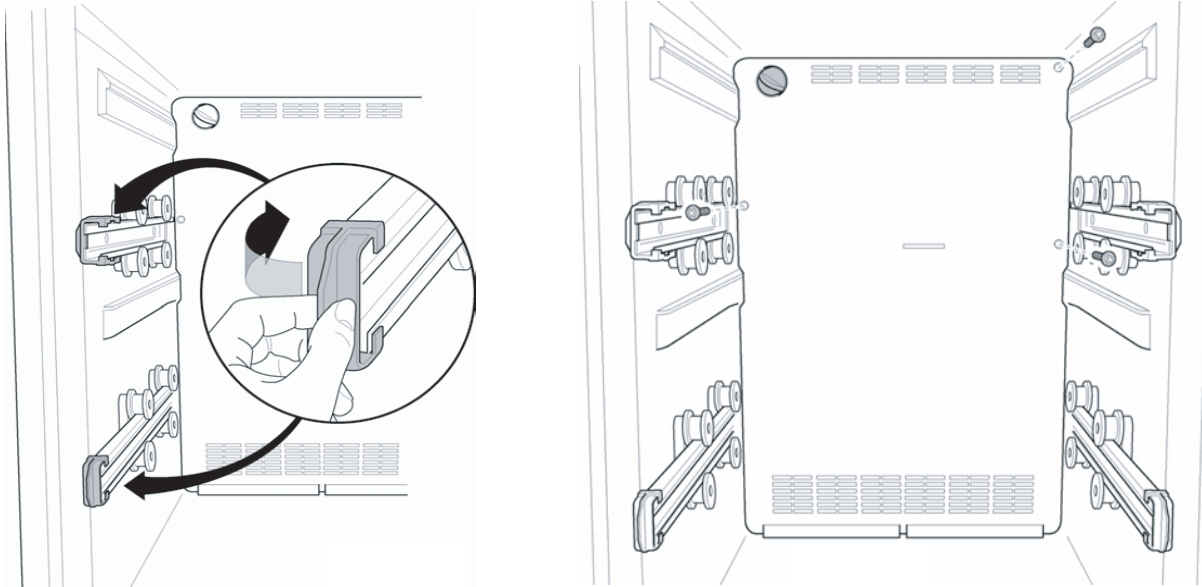


6. Access to the individual components

6.1 Freezer section

Proceed as follows in order to access the components inside the freezer section:

- Remove the trays from the guide rails. To do this rotate the stops as shown on the diagram:
- Remove the 3 screws in the cover and pull it out to the side.



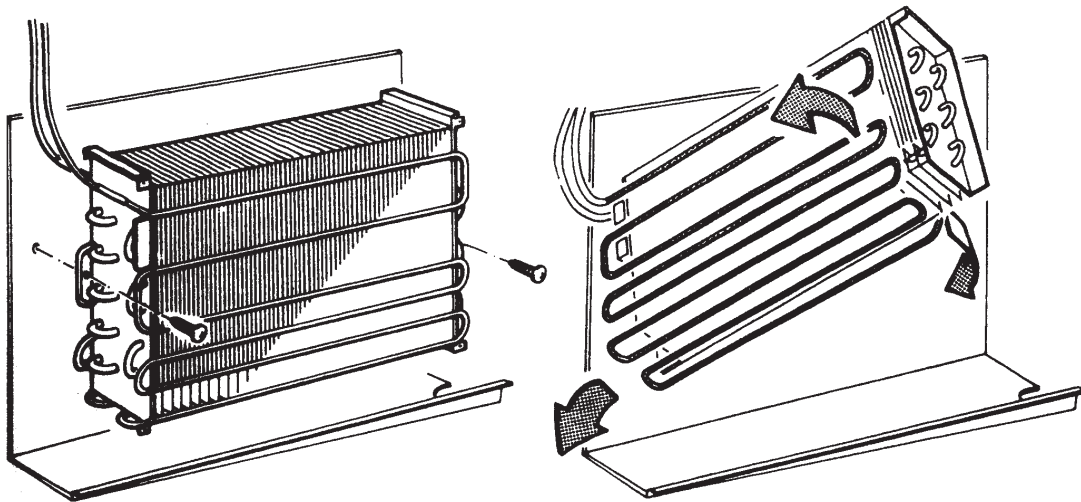
6.2 Replacing the flap thermostat

Unhook the thermostat bulb and then remove the screws with which the thermostat is attached to the cell.

6.3 Defrost resistor

Remove the screws with which the battery-operated evaporator is fastened to the bottom of the cell. Carefully tilt the battery, making sure that the leads are not damaged.

The resistor is snapped into the slots in the battery ribs.



7. Customer service program – freezer section

7.1 Start of the customer service program

To start the customer service program, proceed as follows:

1. Insert the plug into the mains socket.
2. Switch off the appliance at the ON/OFF button (A) (both freezer and refrigerator section).
3. Pull out the mains plug.
4. Open one of the freezer doors.
5. Insert the plug again into the mains socket.
6. Within 10 seconds of connecting the appliance to the mains, press the button “deactivate alarm” (B) and at the same time the “superfrost function” (C).

As confirmation that the customer service program has been activated, an acoustic signal is sounded for a few seconds and

- all the LEDs in the display electronics glow
- as well as all the display segments in the display electronics (the digits 88 are shown).



7.2 Acknowledge the customer service program

The customer service program is terminated when one of the following conditions is given:

- The mains plug is pulled out and then reinserted into the mains socket;
- 40 minutes have passed without any button being pressed.

7.3 Functions of the customer service program

Press the “deactivate alarm” (B) button in order to move to the next phase.

Press the “superfrost function” (C) button in order to activate/deactivate the loads (compressor, resistors, ventilator etc.).

List of the phases in the customer service program:

1. All LEDs and segments of the electronics display will be glowing.
2. All LEDs and segments of the electronics display will be off.
3. The load controlled by acs TH1 is checked (the number 0 is shown as the right-hand digit of the display).
For activating/deactivating the load press the “superfrost function” button.
4. The load controlled by acs TH2 [defroster resistor, compressor etc.] is checked (the number 1 is shown as the right-hand digit of the display). For activating/deactivating the load press the “superfrost function” button.

-
5. The load controlled by acs TH3 [not used with this appliance] is checked (the number 2 is shown as the right-hand digit of the display).
For activating/deactivating the load press the “superfrost function” button;
 6. The load controlled by acs TH4 [ventilator of the battery-operated evaporator] is checked (the number 3 is shown as the right-hand digit of the display).
For activating/deactivating the load press the “superfrost function” button;

Note! When moving to the next phase and the “deactivate alarm” button is pressed, the operating mode of the load is maintained (e.g. when the compressor has been activated it will continue to be activated through the subsequent phases); in this way the loads can be checked simultaneously.

7. The phase reserved for the manufacturer's site is to be ignored (move on to the next phase!);
8. Checking the doors. The decade digit on the display is associated with both the freezer doors. If one of the two freezer doors is open, the digit 1 is shown, if both the door switches are activated the digit 0 appears (the door switches are connected in parallel!).
9. Control of the counter. On the display approximately every second an incrementing number is shown. It is a counter which is used by the electronics for its internal control.

Now all the phases required for controlling the loads are displayed. Therefore it is recommended to interrupt the customer service program by pulling out the mains plug of the appliance and then reinserting it into the mains socket.

Note! If you do not wish to interrupt the customer service program it will continue with the subsequent phases which are exclusively tests used at the manufacturer's and should therefore be ignored. In this case, the customer service program is also activated by pulling out and reinserting the mains plug.

8. Alarm indication

8.1 Alarm freezer temperature

When a temperature of -8 °C is reached in the freezer section the temperature alarm is activated and

- the control lamp associated with the alarm will flash;
- the temperature display will flash;
- the buzzer will be sounded.

Press the button for deactivating the alarm in order to:

- switch off the buzzer;
- to display for 5 seconds the highest temperature reached within the freezer.

The alarm control lamp will continue flashing but switch off automatically when the temperature has fallen again.

After a power failure on return to normal operating conditions if the deactivate button of the alarm has not been pressed:

- the acoustic signal will be deactivated;
- the temperature display will flash;
- the control lamp associated with the alarm will flash.

If the button for deactivating the alarm is pressed:

- for 5 seconds the highest temperature reached within the freezer is displayed;
- the temperature display will stop flashing;
- the alarm control lamp will stop flashing.

8.2 Alarm freezer section door open

If one of the two freezing room doors is open for longer than 80 seconds:

- The control lamp associated with the alarm will flash;
- The temperature display will flash;
- The buzzer will be sounded.

For switching off the acoustic indicator, the button for deactivating the temperature alarm must be pressed.

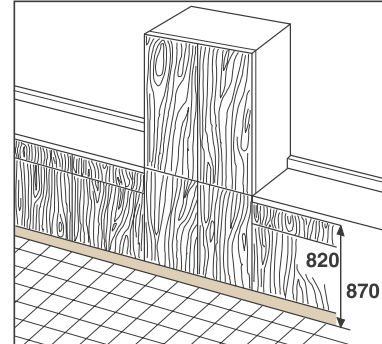
The alarm control lamp will go out when the doors have been closed.

9. Installation instructions

9.1 Adjusting the height

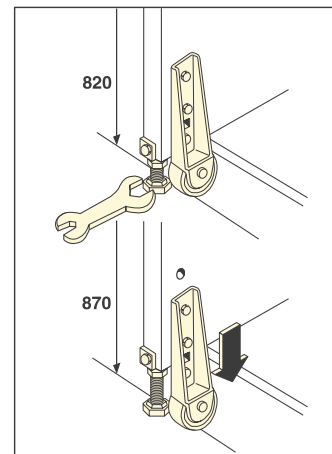
The height of the appliance can be matched to that of the other kitchen units by adjusting it to 820 mm or to 870 mm.

Prior to installing the appliance, set the height of the rear wheels and feet.



The initial height is set to 820 mm.

In order to alter the height to 870 mm, the four feet have to be unscrewed by means of a suitable spanner. The wheels must then be removed and fastened in a lower position.



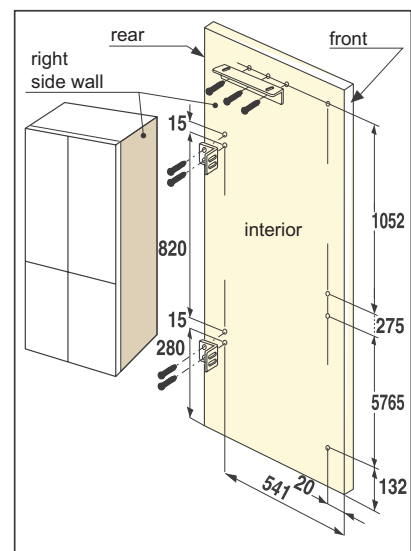
9.2 Mounting the side panels

Fix the angle to the position indicated in the diagram.

The 132 mm dimension is intended for a 100 mm base beneath the plate.

Should the dimension of the base differ, the dimension of 132 mm is to be increased or decreased accordingly.

Lean the side wall onto the appliance.

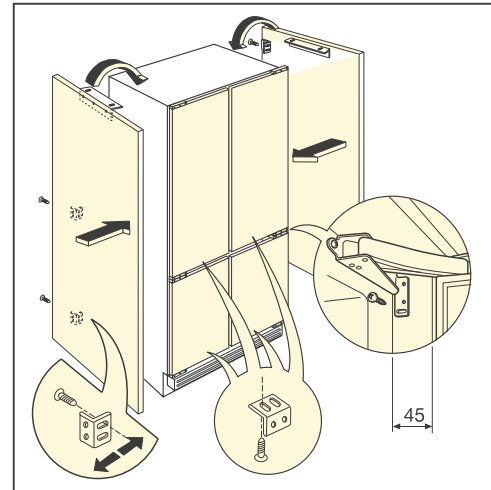


Attach the rear brackets, taking into account the depth of the side wall and the external furniture dimension of 900 mm.

During installation observe that the appliance's housing edge must be 45 mm from the edge of the kitchen furniture.

Fasten the panels at the front.

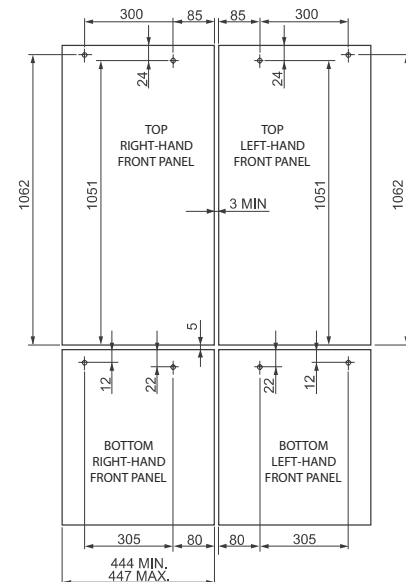
Attach the angle brackets (enclosed in the bag) to the bottom part of the doors (already prepared).



9.3 Installation of the doors

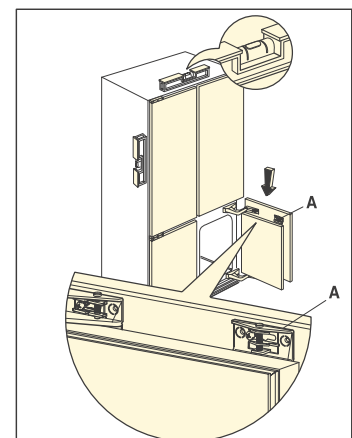
Drill holes in the doors as shown on the diagram and ensure that the two door screws enclosed in the bag are not overtightened when they are screwed in.

Carefully align the appliance before installing the doors and ensure that it stands upright straight.



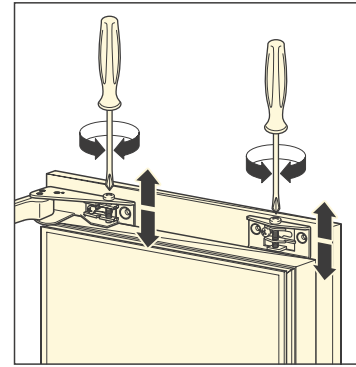
Open one of the bottom doors and insert the already positioned screws into the long hole at the hinge and put on the adjustment washer. Then move the door until it closes properly.

Repeat this procedure for the other doors.

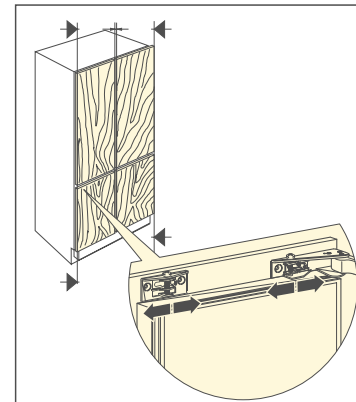


Then close the door and check that it is at the desired height. If necessary, adjust using the adjustment screws on the disk and the hinge.

The same adjustment screws are also used for vertically aligning the doors.

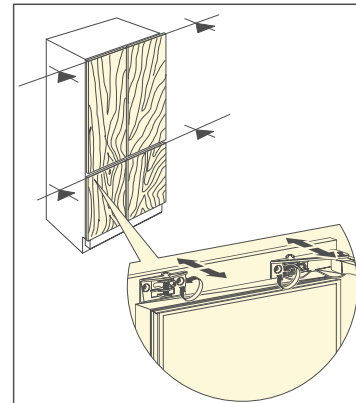


Check the horizontal alignment of the doors and if necessary adjust their position at the long holes.

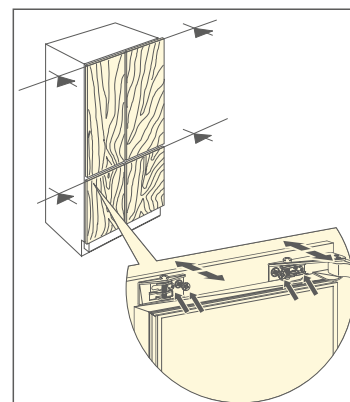


Open the door.

Adjust the closing of the doors by moving the register bushes and the bottom angle bracket.

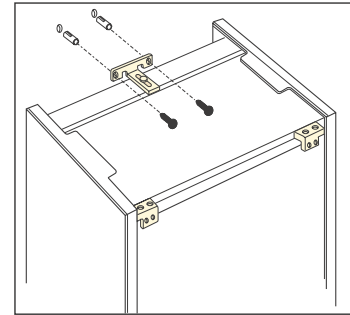


After aligning the doors, a locking screw is screwed into the bushes (of the top and bottom hinge) and into the base plate.



9.4 Installing the appliance

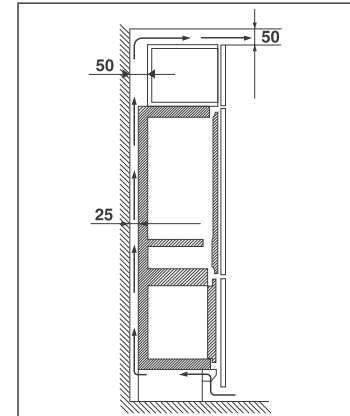
Fasten it to the wall with the angle bracket provided provided for this purpose.



In order to allow good air circulation, do not cover the top of the appliance.

Should a kitchen unit be installed above the appliance, it is to be fastened 50 mm from the wall.

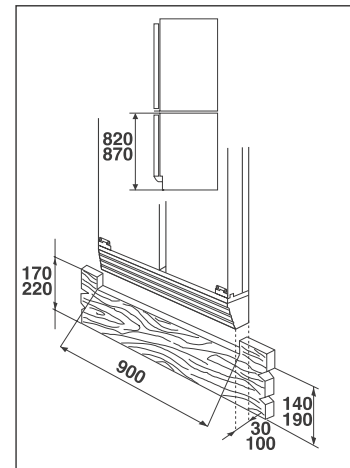
The distance to the ceiling must be no less than 50 mm.



9.5 Attaching the base

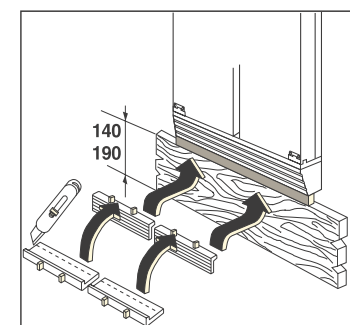
Height adjustment H = 820 mm

For a base of 140 to 170 mm, make an opening as shown.



If the base is higher than 100 mm and lower than 140 mm, cut the compensation cover piece accordingly and mount it between the base and the ventilation grid using the snap fastening underneath the grid.

If the base is 100 mm high, the adjustable compensation cover piece is to be mounted over the full depth.

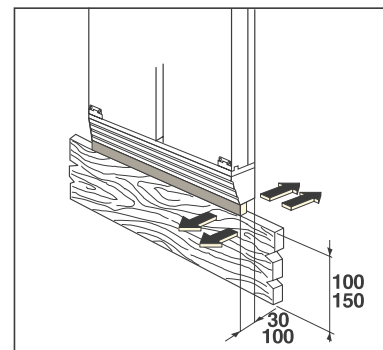


Height adjustment H = 870 mm

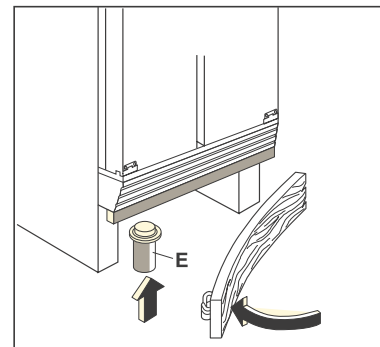
For a base of 190 to 220 mm, make an opening as shown.

If the base is higher than 150 mm and lower than 190 mm, cut the compensation cover piece accordingly and mount it between the base and the ventilation grid.

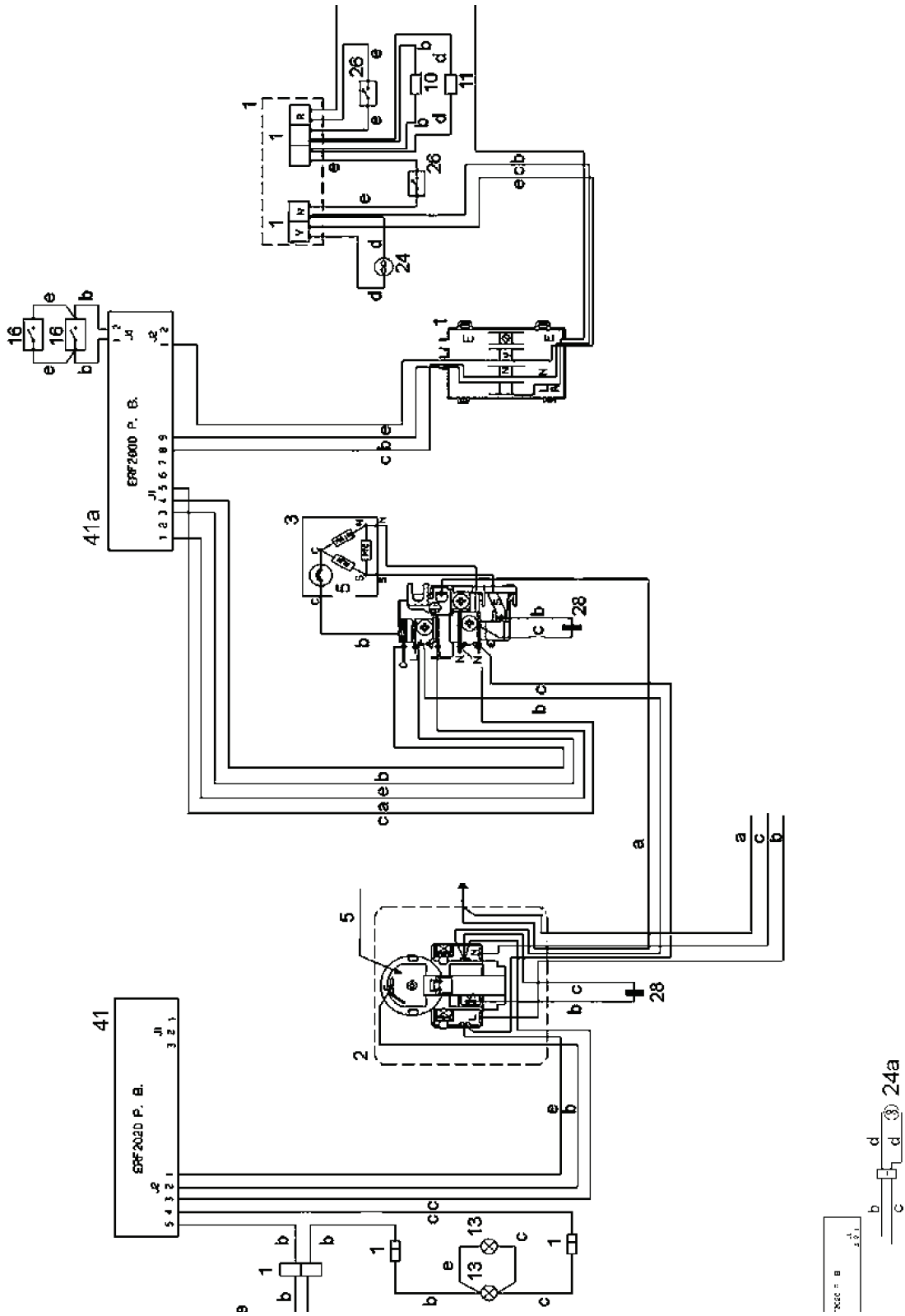
If the base is 150 mm high, the adjustable compensation cover piece is to be mounted over the full depth.



If the built-in appliance is to be integrated into a fitted kitchen, use foot E to fasten the base.



10. Circuit diagram IKE 458-4-4T



Key

1. Terminal board
2. Refrigerator section compressor
3. Freezer section compressor
5. Motor protection switch
10. Defroster resistor
11. Condensation water channel resistor
13. Refrigerator lamp
15. Refrigerator door switch
16. Freezer section door switch
24. Battery-operated evaporator ventilator
- 24a. D.A.C. ventilator
26. Overheating protection switch (+40 °C)
26. Overheating protection switch (+40 °C)
28. Operation condenser (only with models where it is provided)
41. Refrigerator section (ERF 2020) electronics
- 41a. Freezer (ERF 2000) electronics
 - a) yellow-green
 - b) brown
 - c) blue
 - d) white
 - e) black
 - f) grey
 - g) red
 - h) orange