Product division

Refridgerating / Freezing

Refridgerator and freezer centre

GAGGENAU

IK 300-254

IK 302-254

IK 300-354

Temperature ranges

Freezer comp.

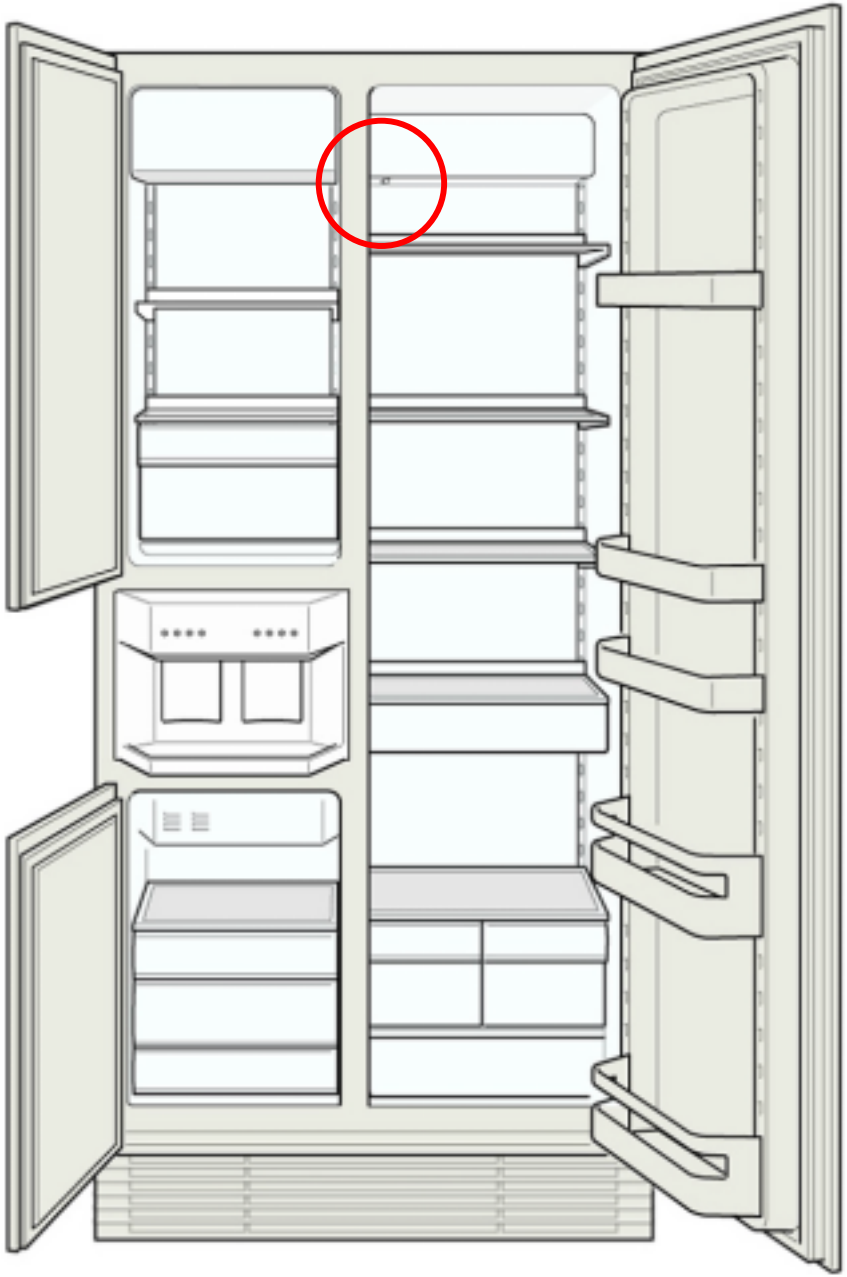
-18°C and colder

Refrigerator comp.

4°C to 14°C

“cool-fresh” comp.

close 0°C

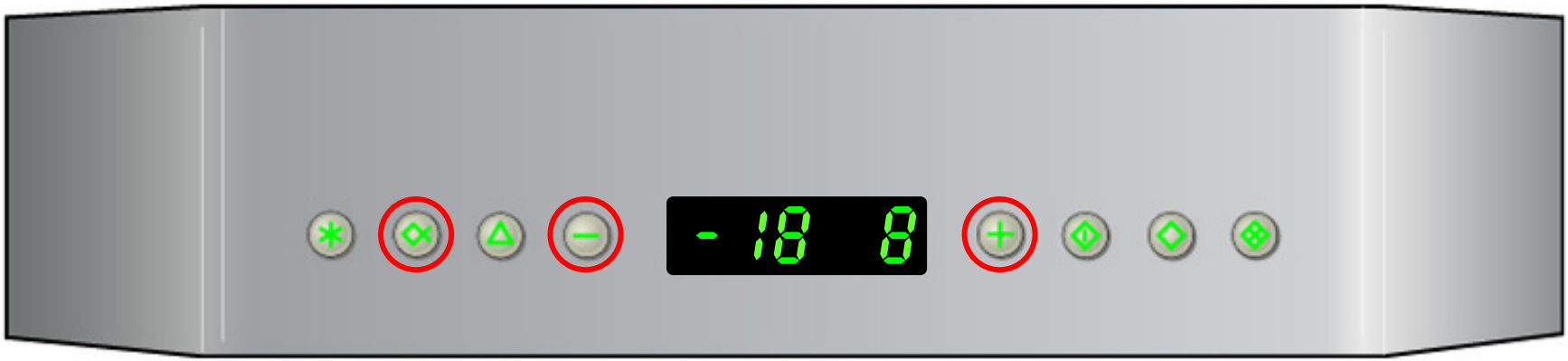


Main switch

- Separates two-pole from the net

Ice and water dispenser

Operation refridgerator compartment

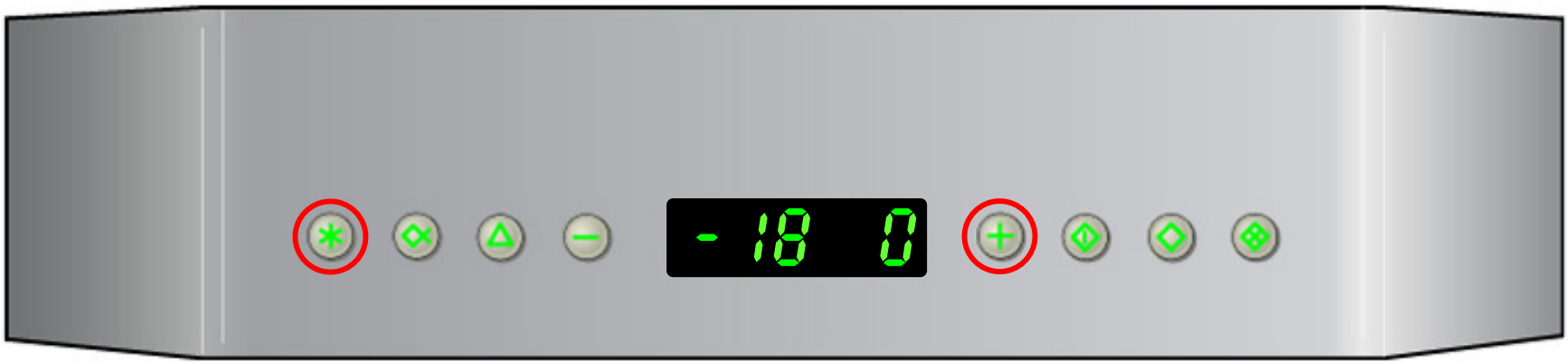


Switch to the temperature indication for the refridgerator comp.

Temperature setting

The setting range is 4 °C to 14 °C.

Switching the refrigerator compartment on and off

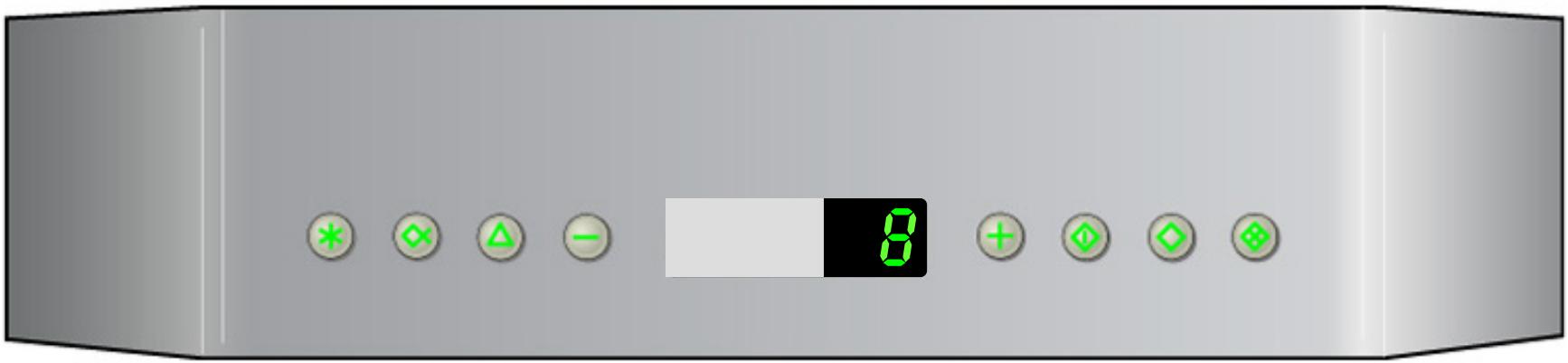


simultaneously press the  and  buttons

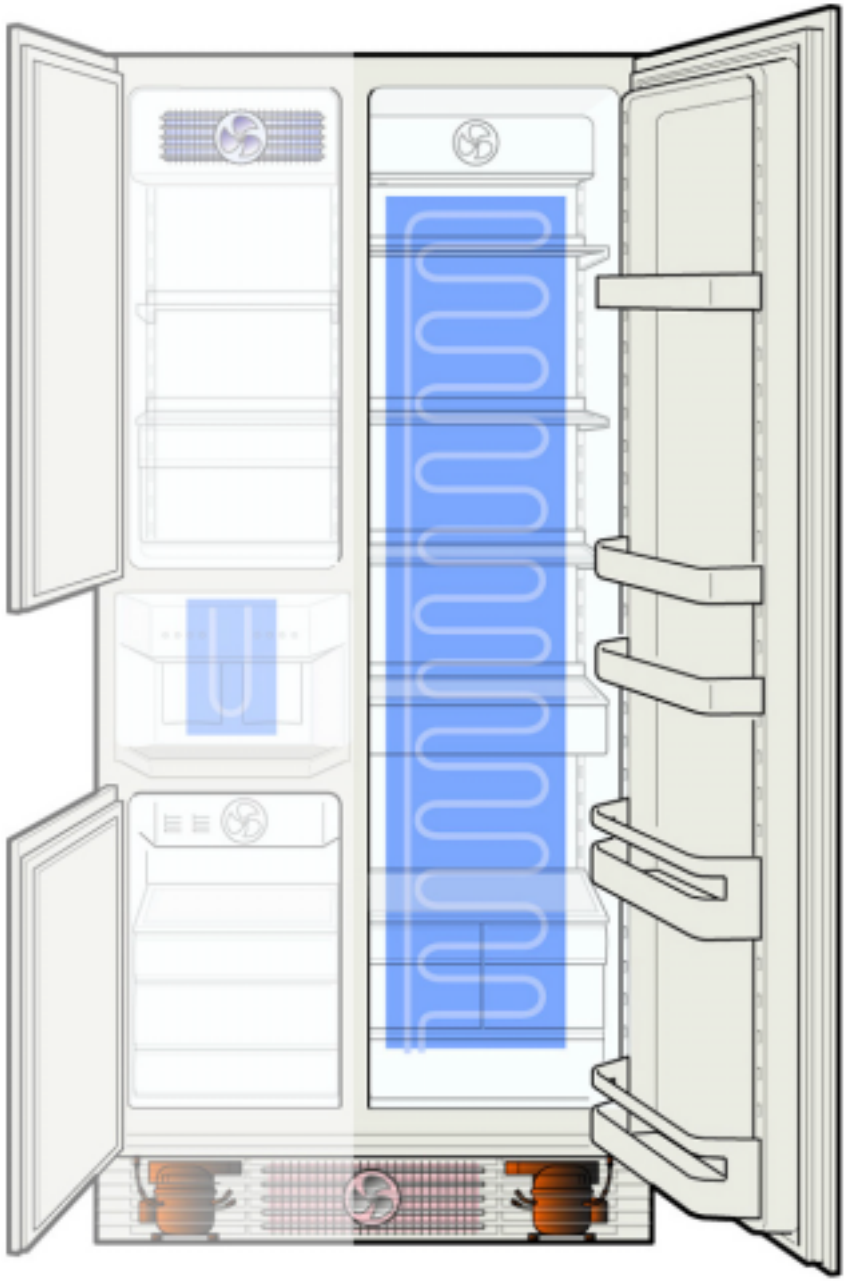
Interior lighting expires

the “cool-fresh” compartment temperature is only displayed

Temperature display for the refridgerator



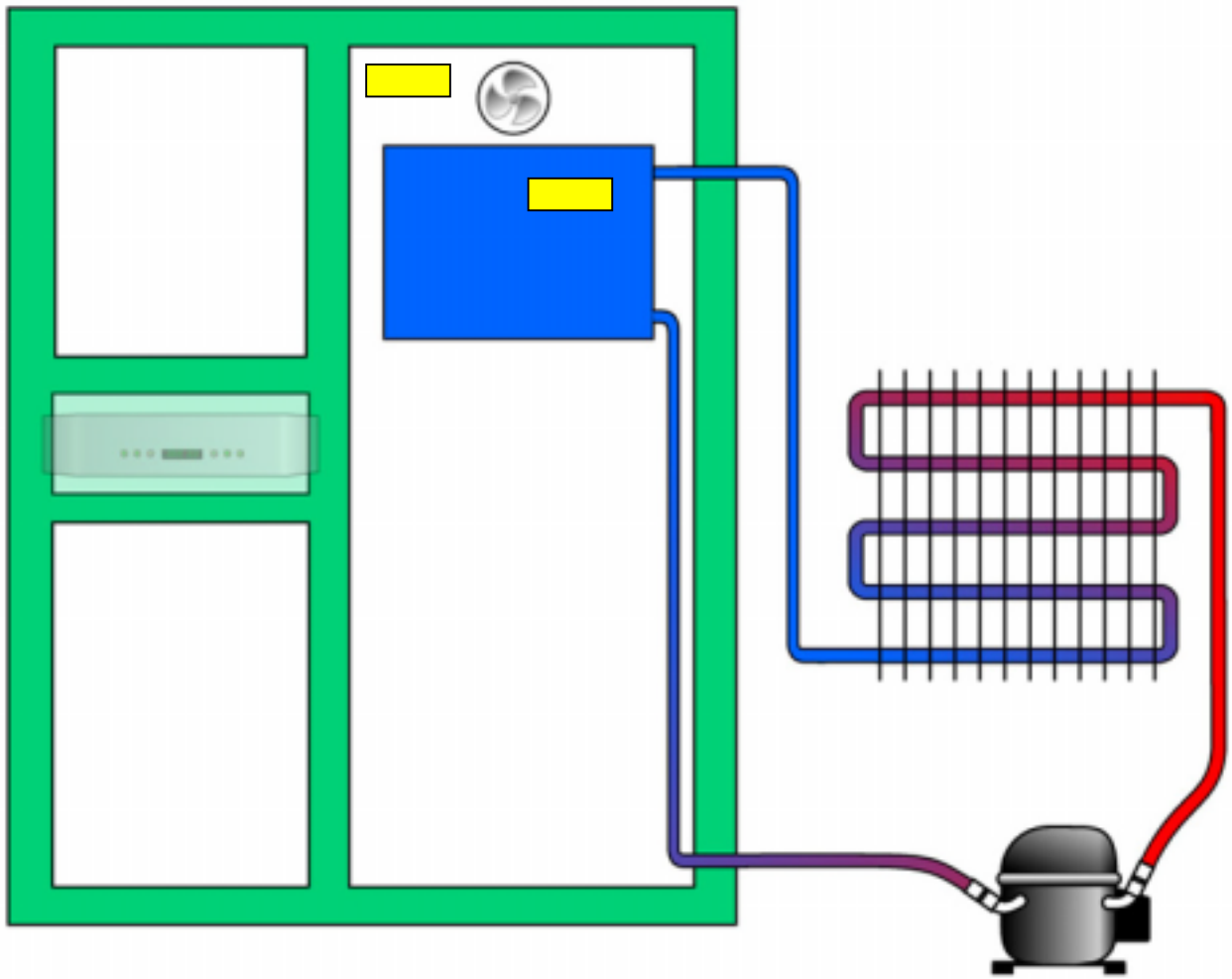
Only the required temperature is displayed



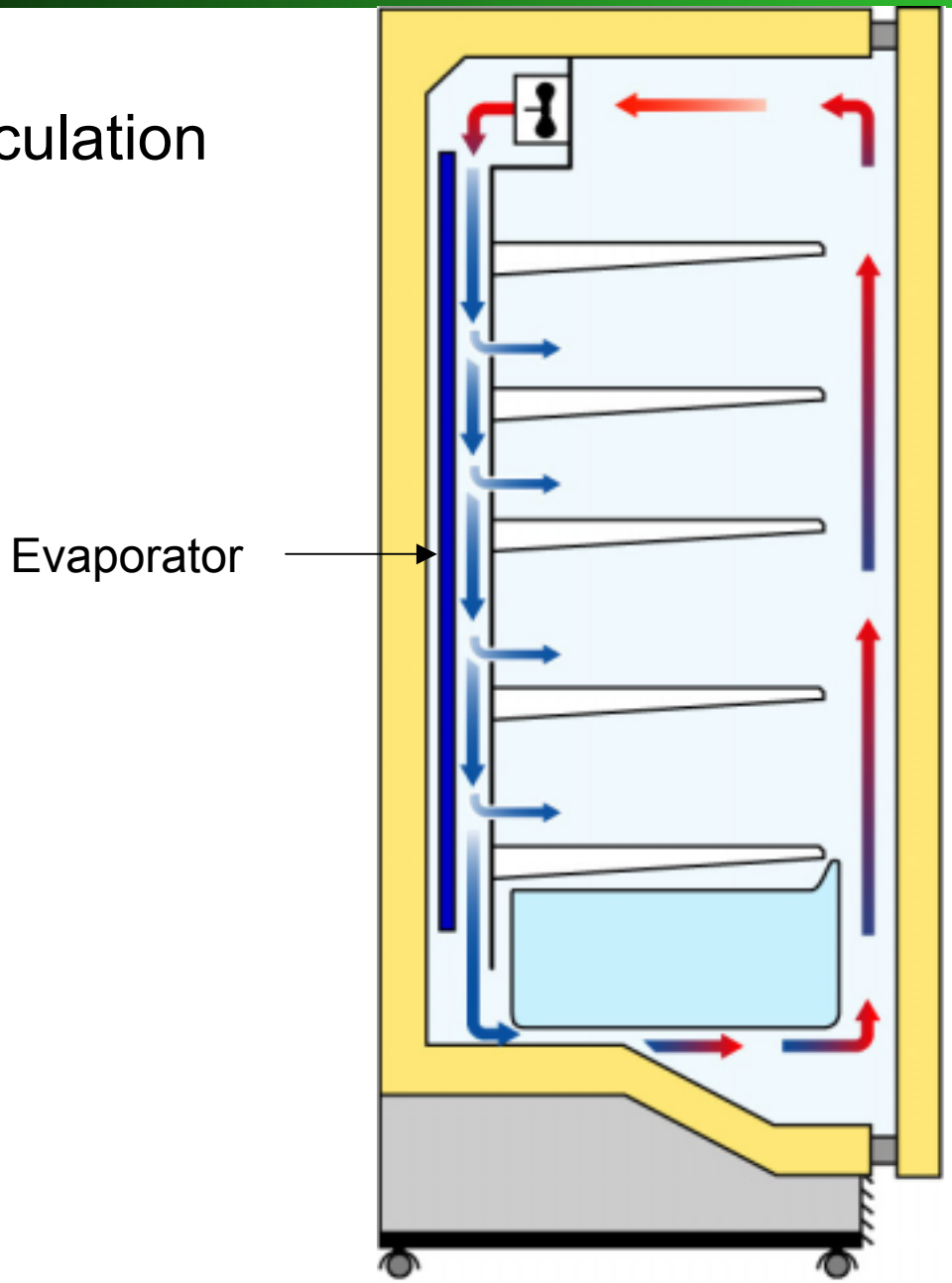
Refridgerator compartment

- Single-circuit cooling system
- Evaporator behind the air conductor
- Fan for air circulating

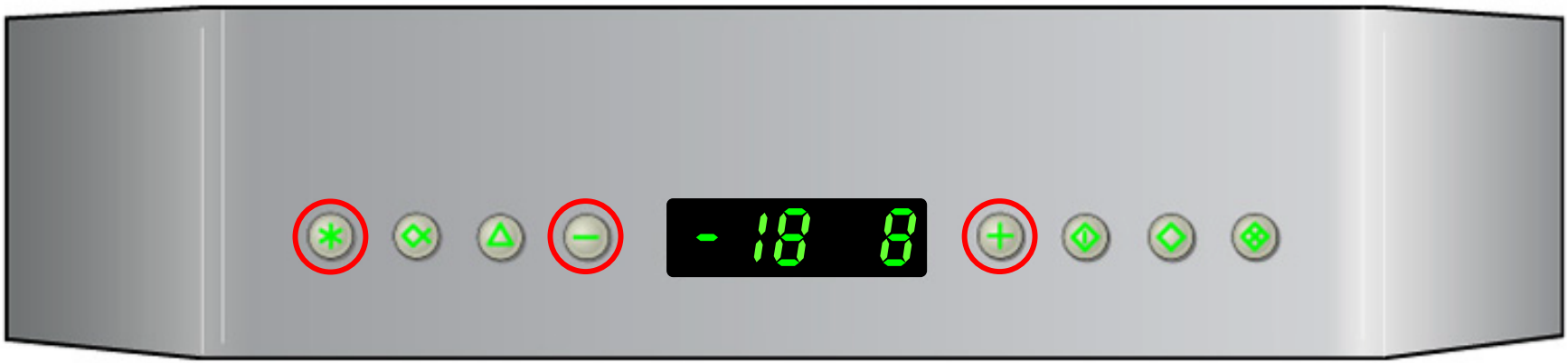
Temperature control



Air circulation



Operation freezer compartment

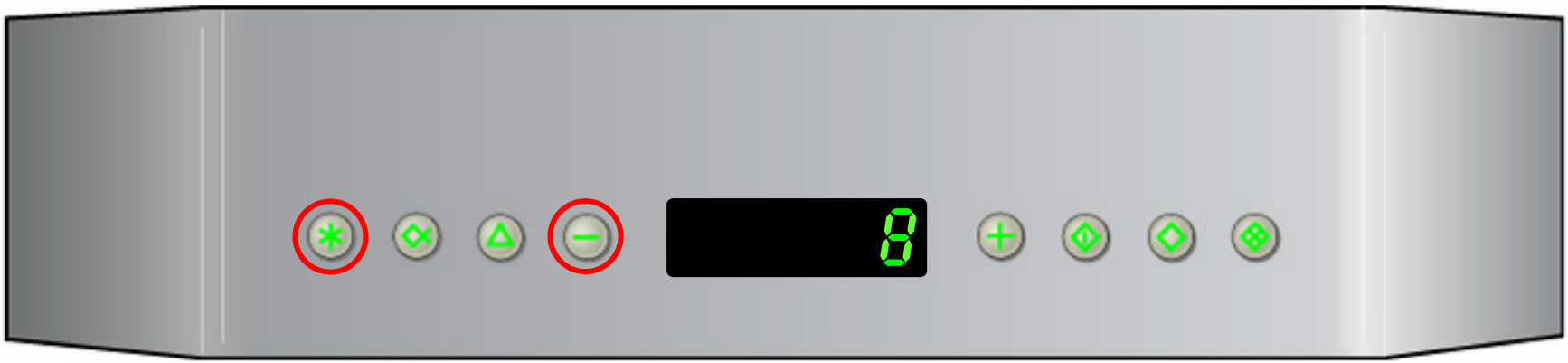


press the button for 10 s

Temperature setting

Setting range –16°C to –21°C

Switching the left side of the appliance on and off



simultaneously press the ✳ and — buttons

Interior lighting expires

Display shows only the refridgerator temperature

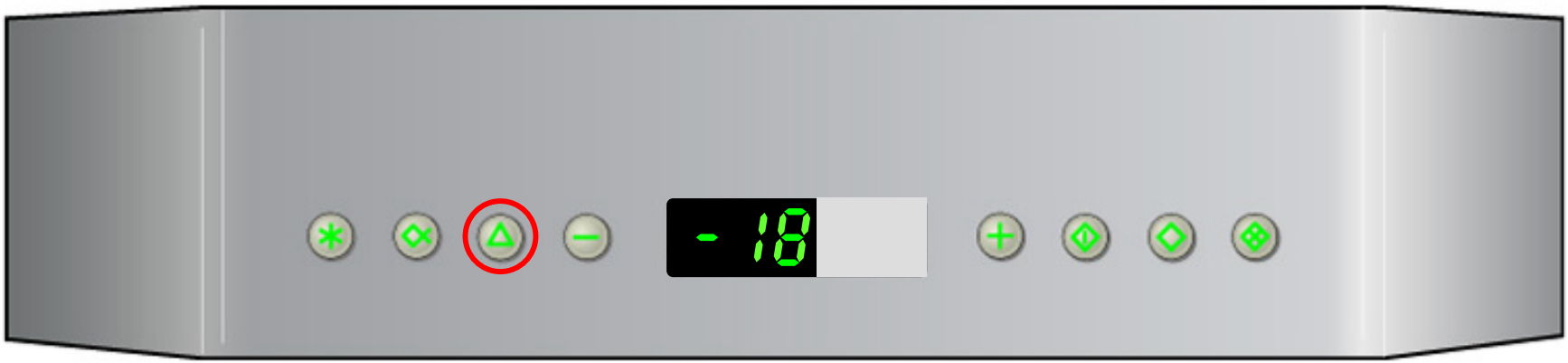
Fast freeze

Press  button

Freezer compartment temperature is regulated for 24h on -26°C

After 24 hours fast freeze switches off by itself

Alarm function



Button and temperature display flashes

Temperatur raises over -3°C

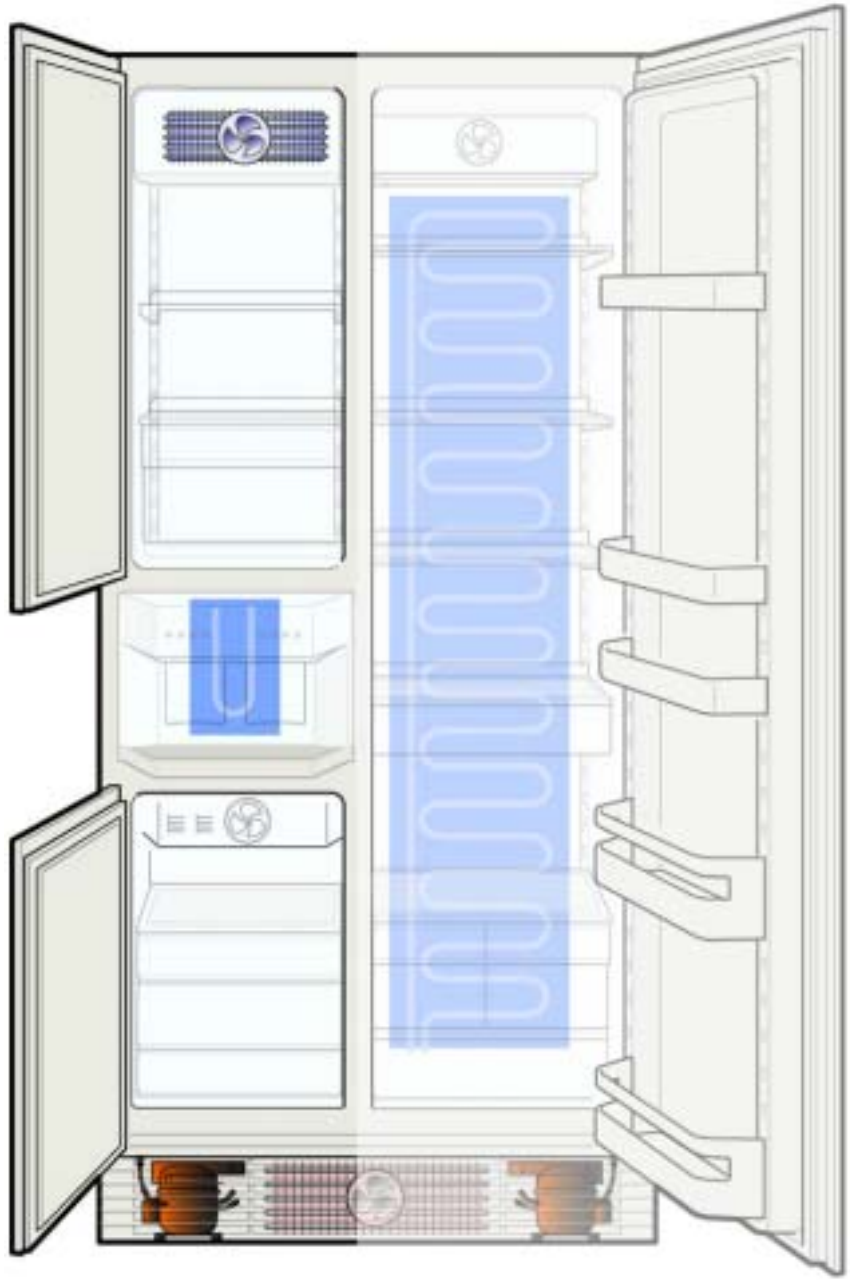
With pressing the button the alarm is deactivated for 6h

Temperature displays freezer compartment

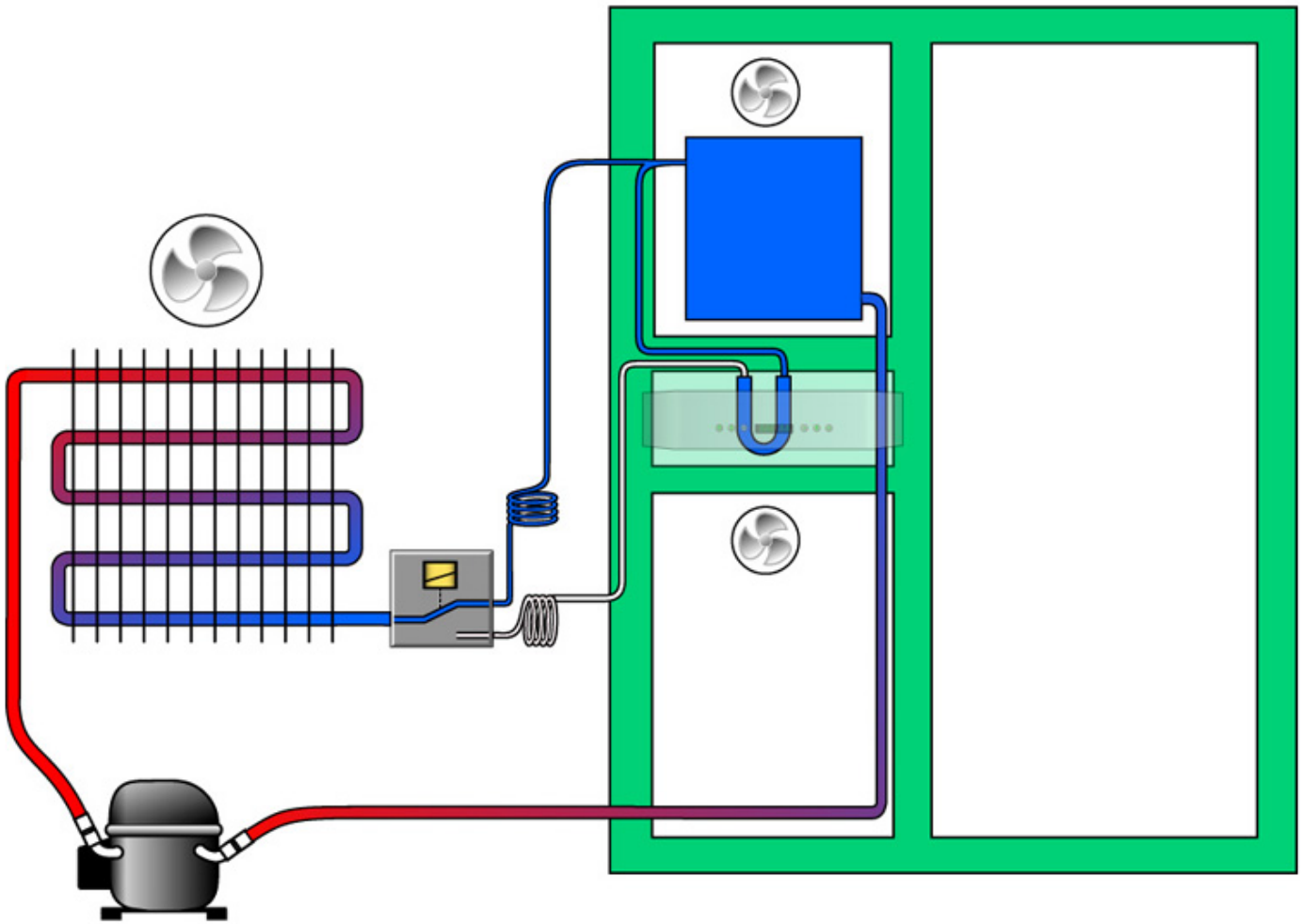
Freezer compartment temperature	Temperature display	
	Closed-loop control	Super mode
Colder than required temperature	Required temperature –1	Actual temperature
Between –16 °C and the required temperature –1	Required temperature	
Between –8 °C and –16 °C		
Temperature was previously colder than –16 °C	Required temperature	
Temperature was previously warmer than –8 °C	Actual temperature	
Warmer than –8 °C	Actual temperature	

Freezer compartment

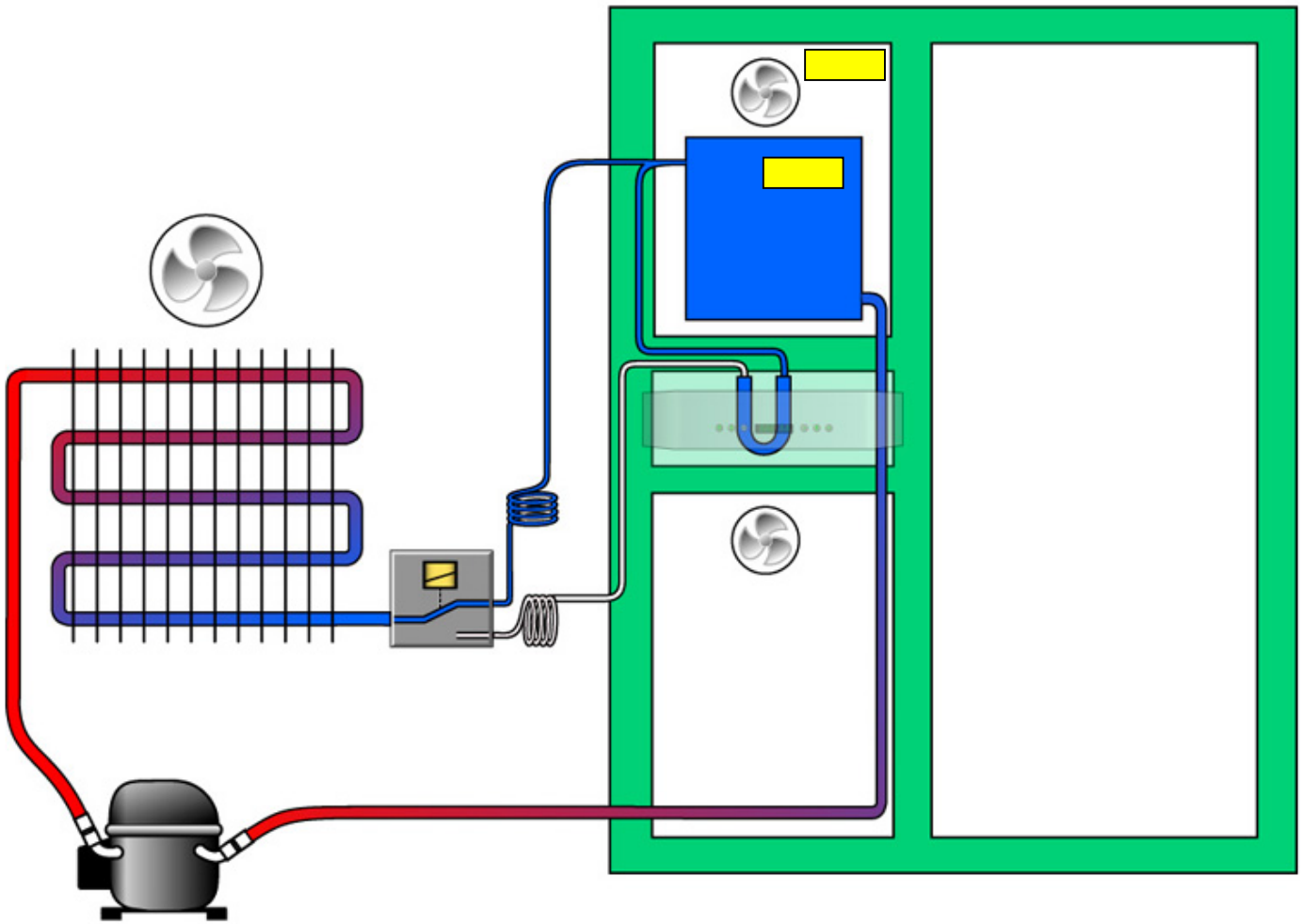
- Dual-circuit cooling system
- Lamellar evaporator
- Evaporator behind the air conductor
- Fan for air circulating



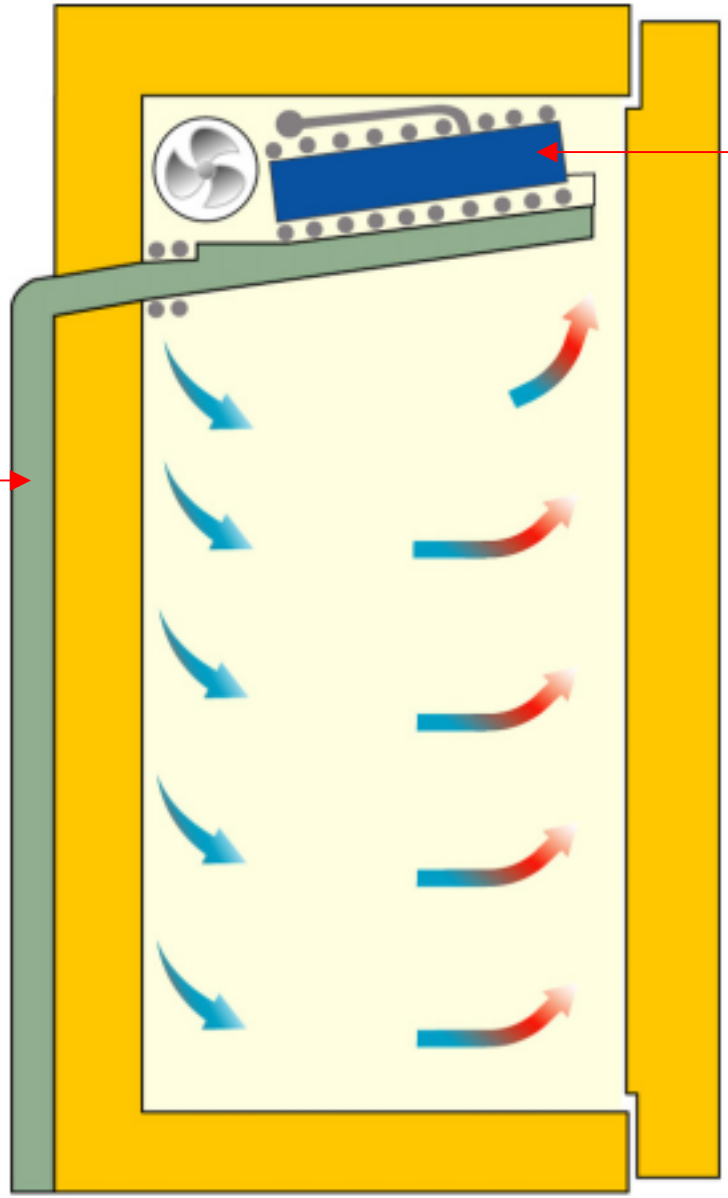
Dual-circuit cooling system



Operation freezer compartment



Freezer-compartment air conductor



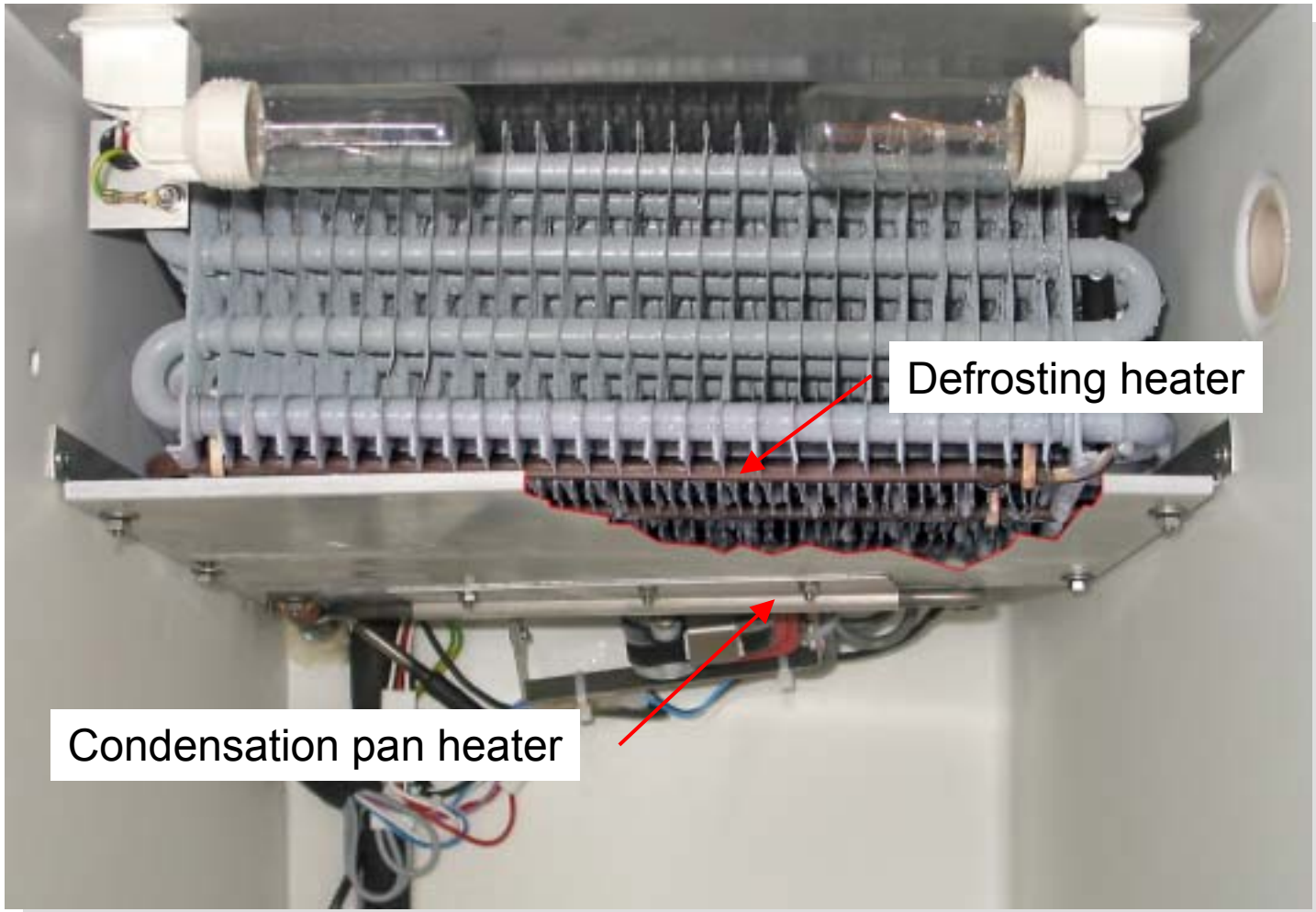
Defrosting the freezer compartment

fuzzy control takes over the timing of the defrosting phase

The time between two defrosting phases is calculated in such a way that a time of 16 min is set for the defrosting phase

The interval between defrosting phases is specified by the electronics module and cannot be influenced

Defrosting heater



Operation ice maker

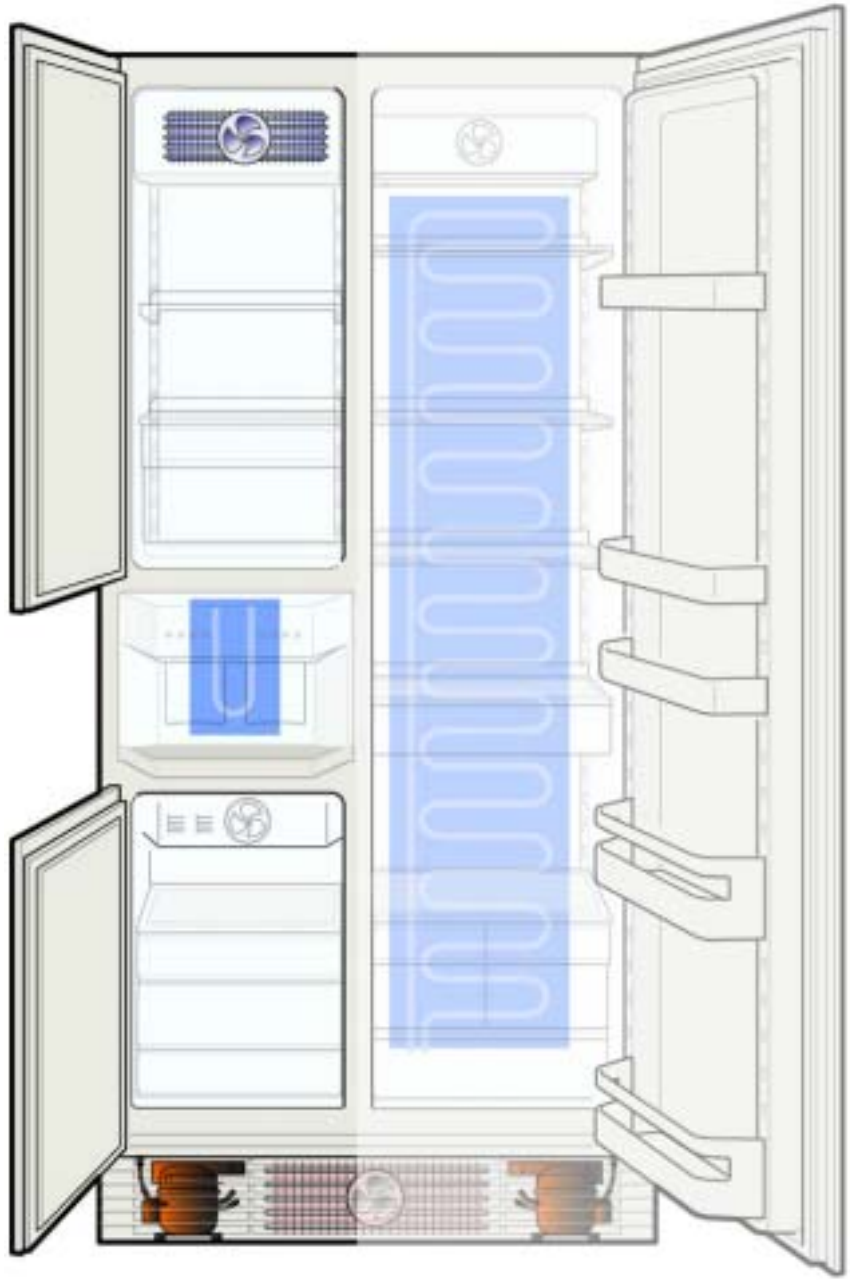
Main switch ice maker

Operation ice cubes

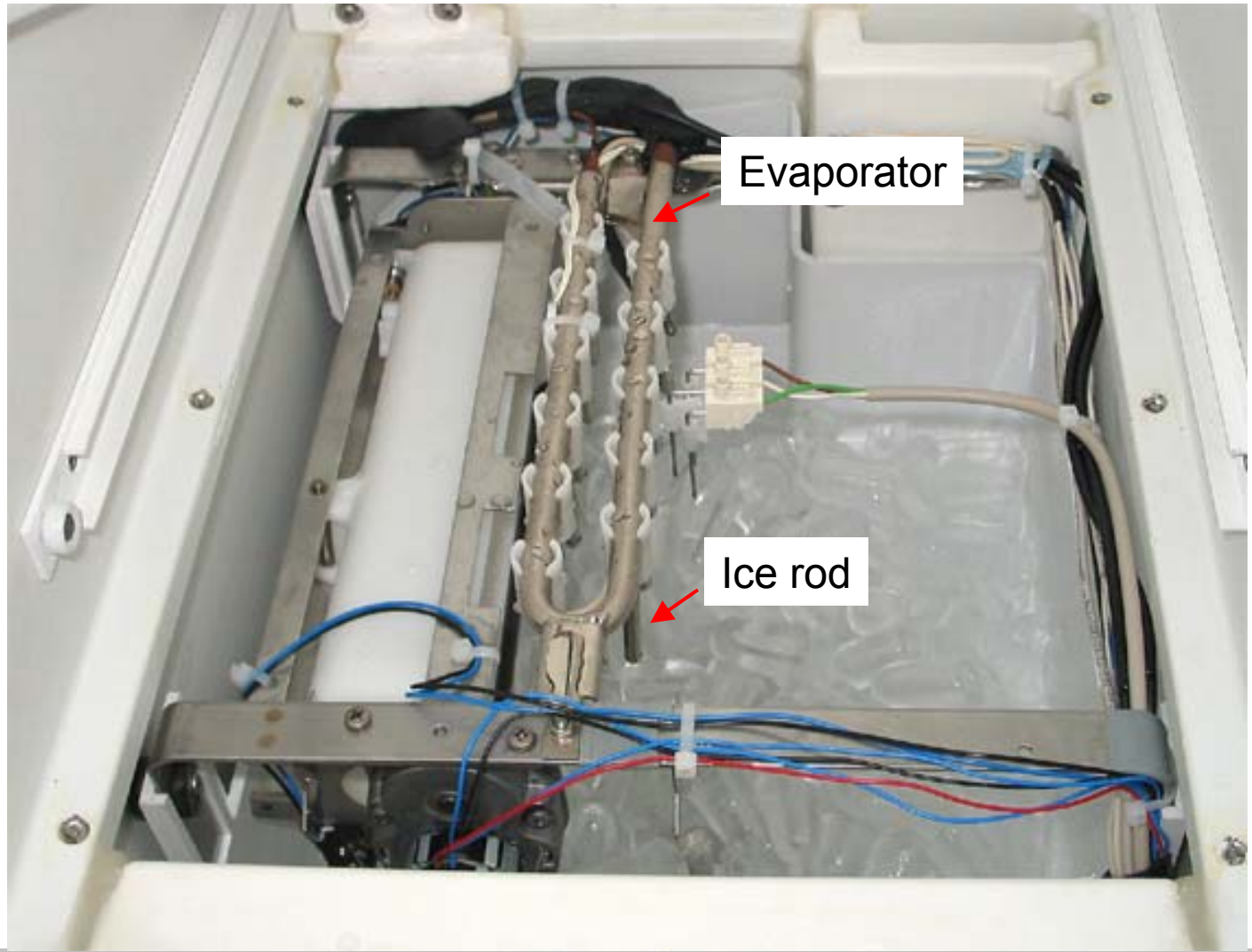
Operation crushed ice

Ice maker

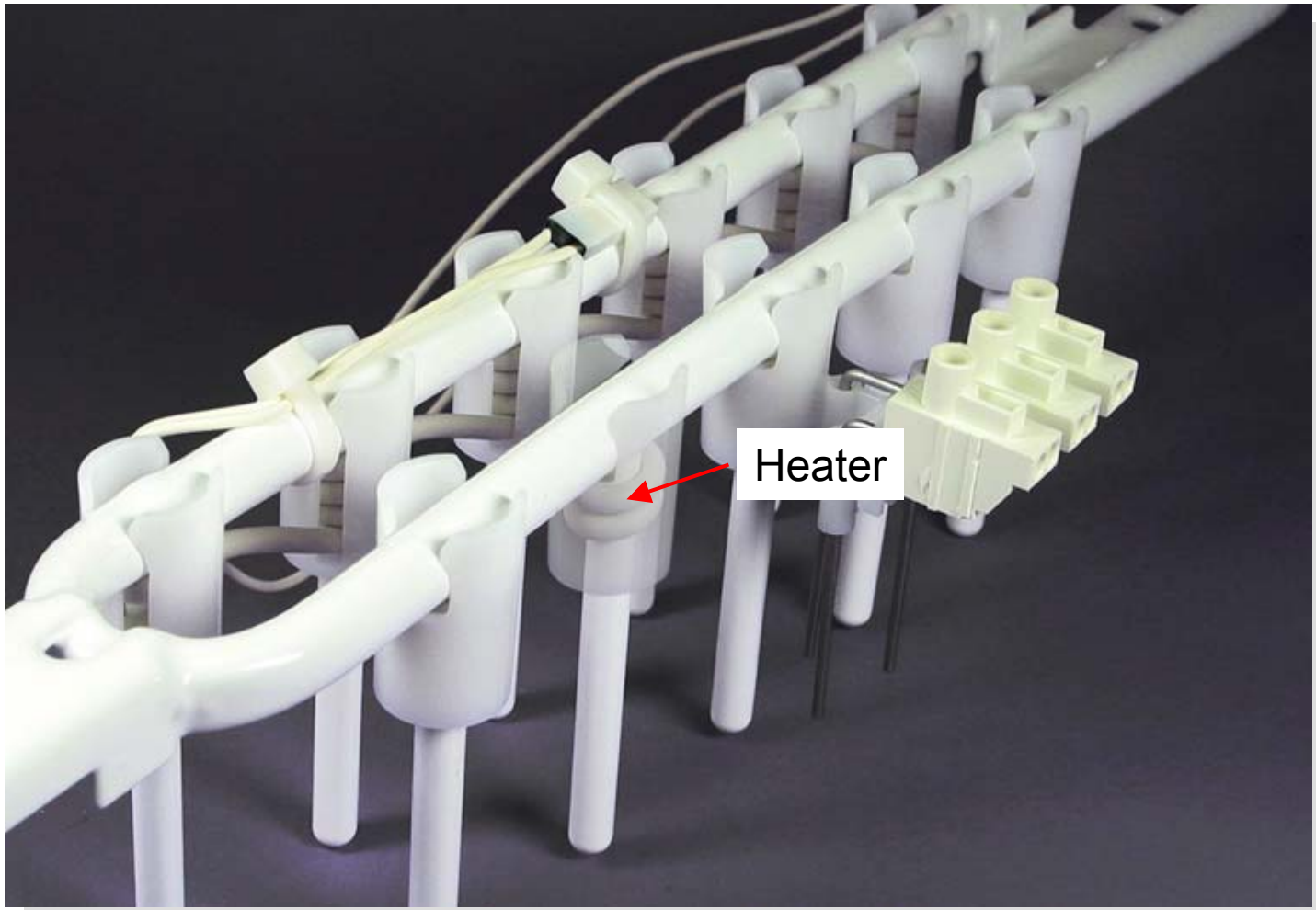
- Dual-circuit cooling system
- Evaporator with ice rods



Evaporator with ice rods



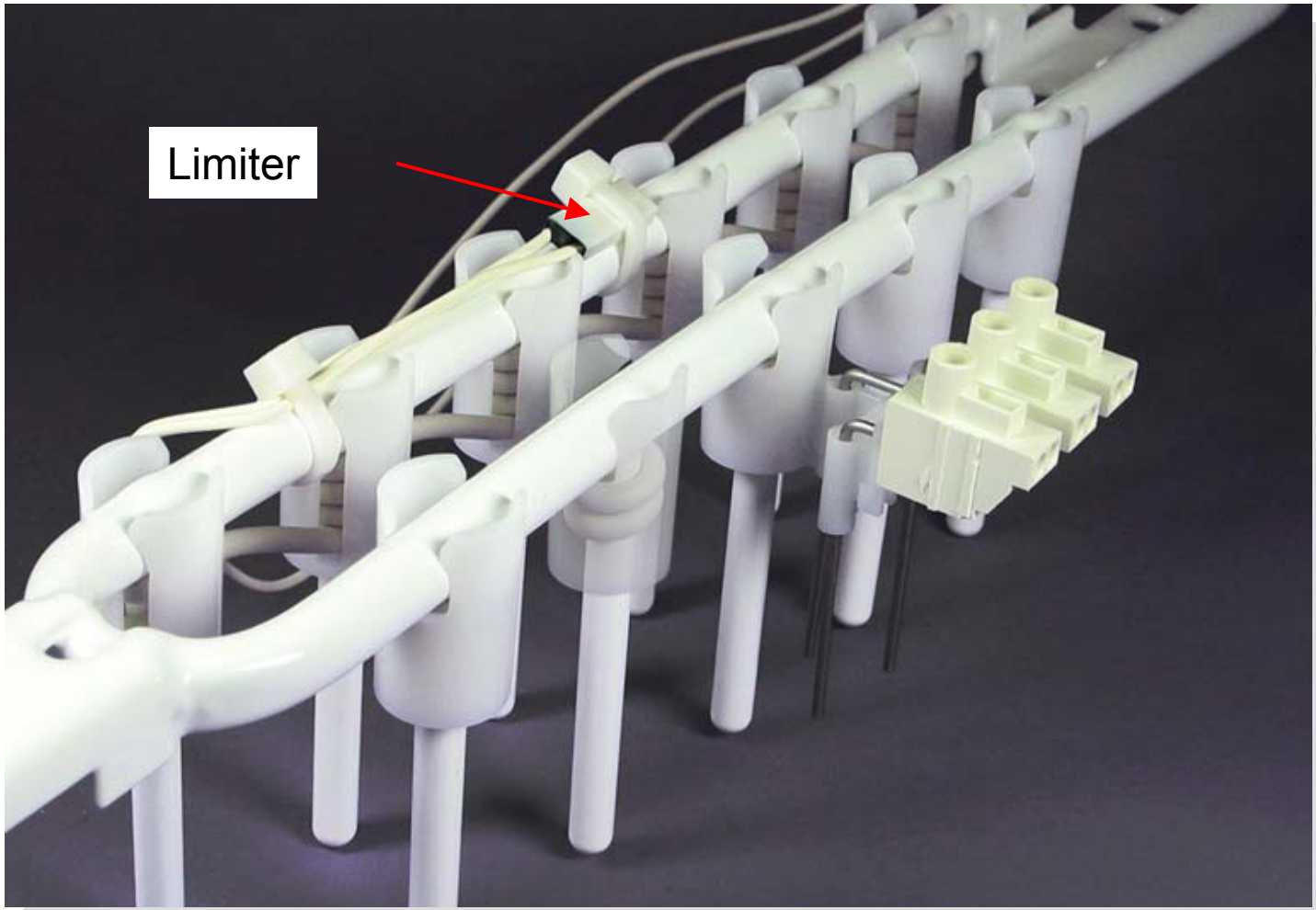
Ice rod heater



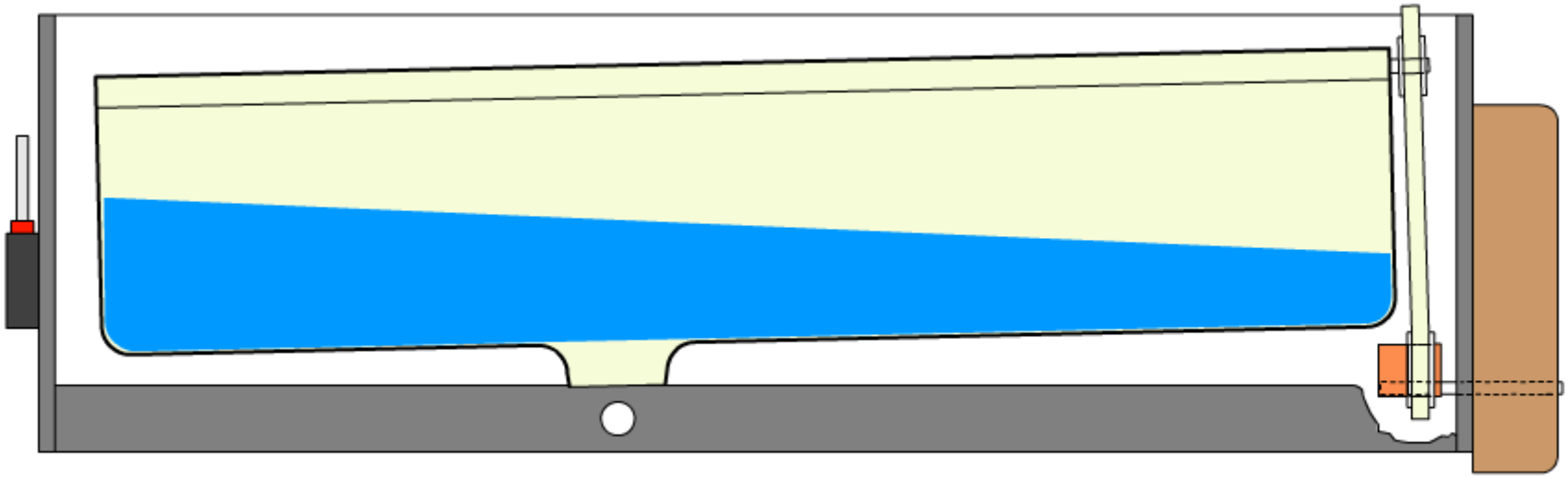
Sensor at the evaporator

Sensor in the ice maker compartment

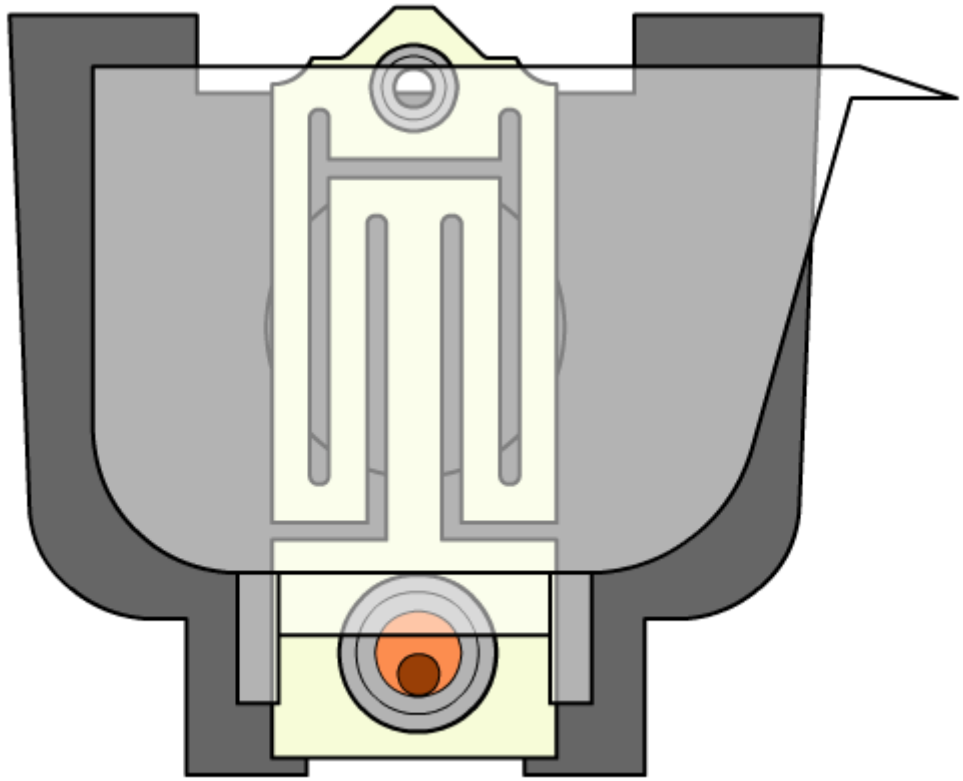
Safety temperature limiter



Water bowl

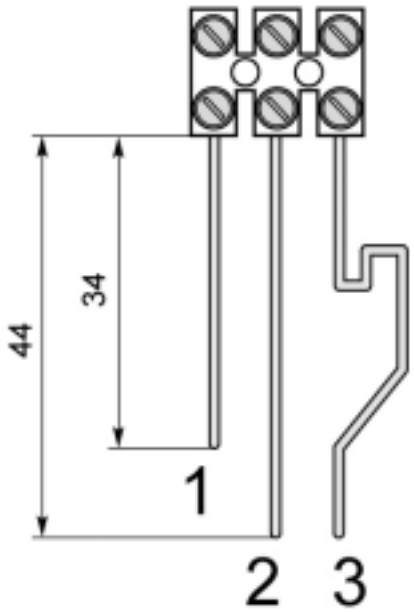


Actuation water bowl



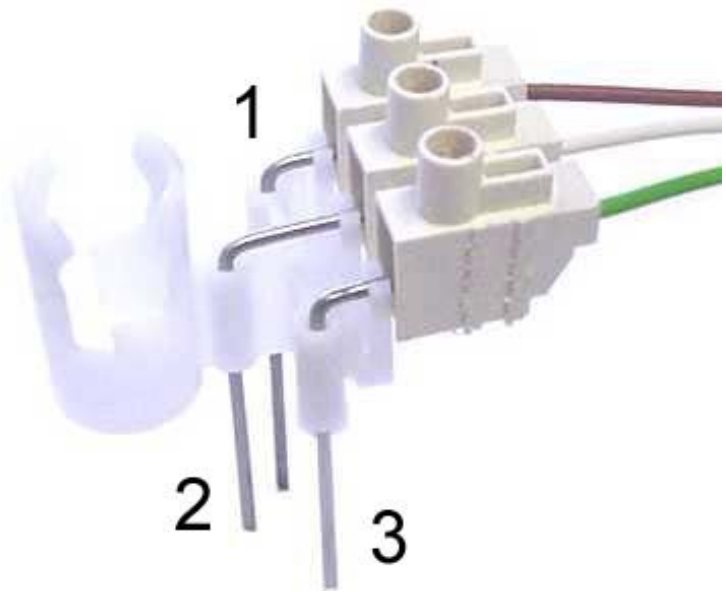
Water electrodes

up KI 23



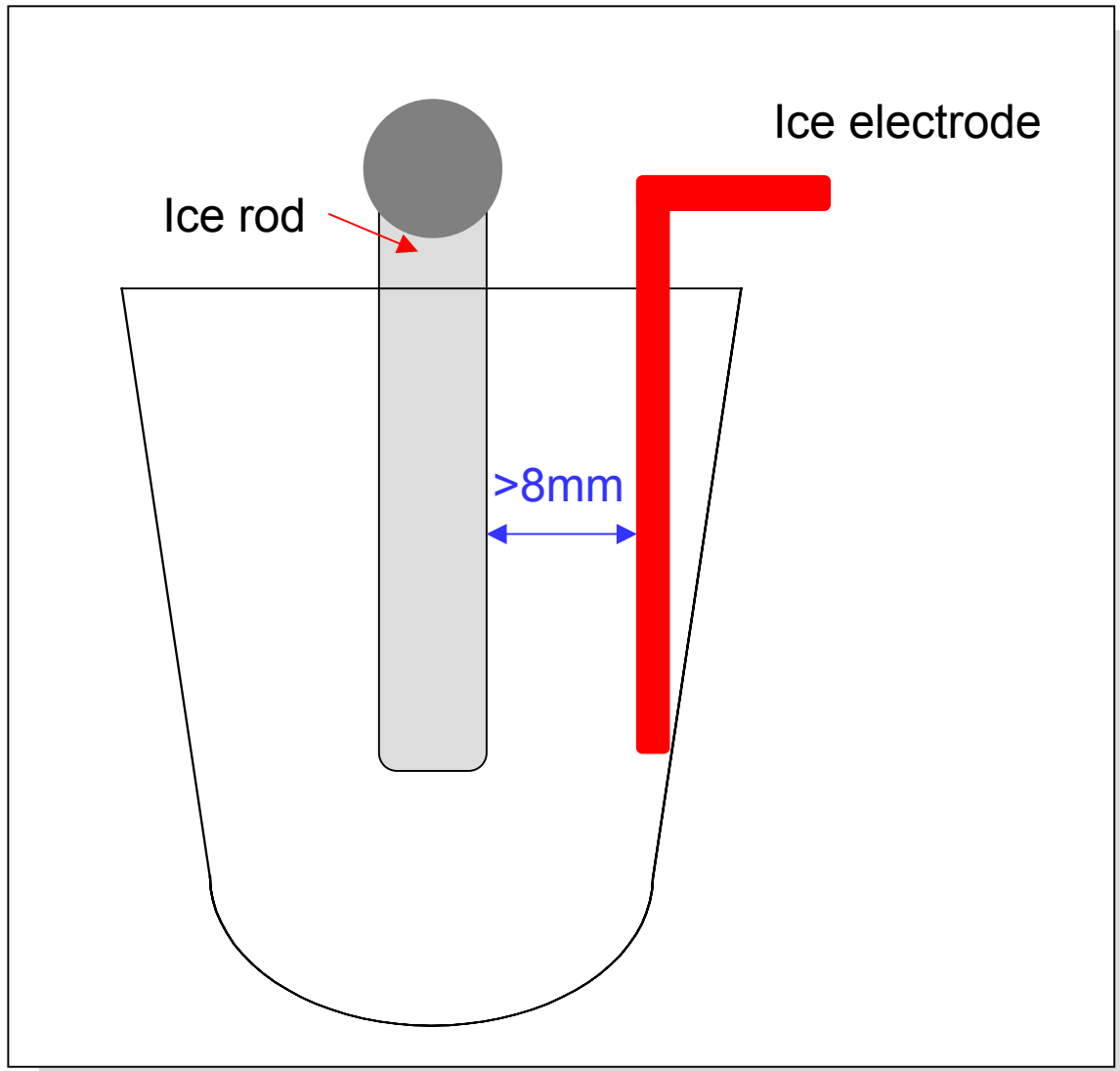
1. Water electrode
2. Common electrode
3. Ice electrode

from KI 24

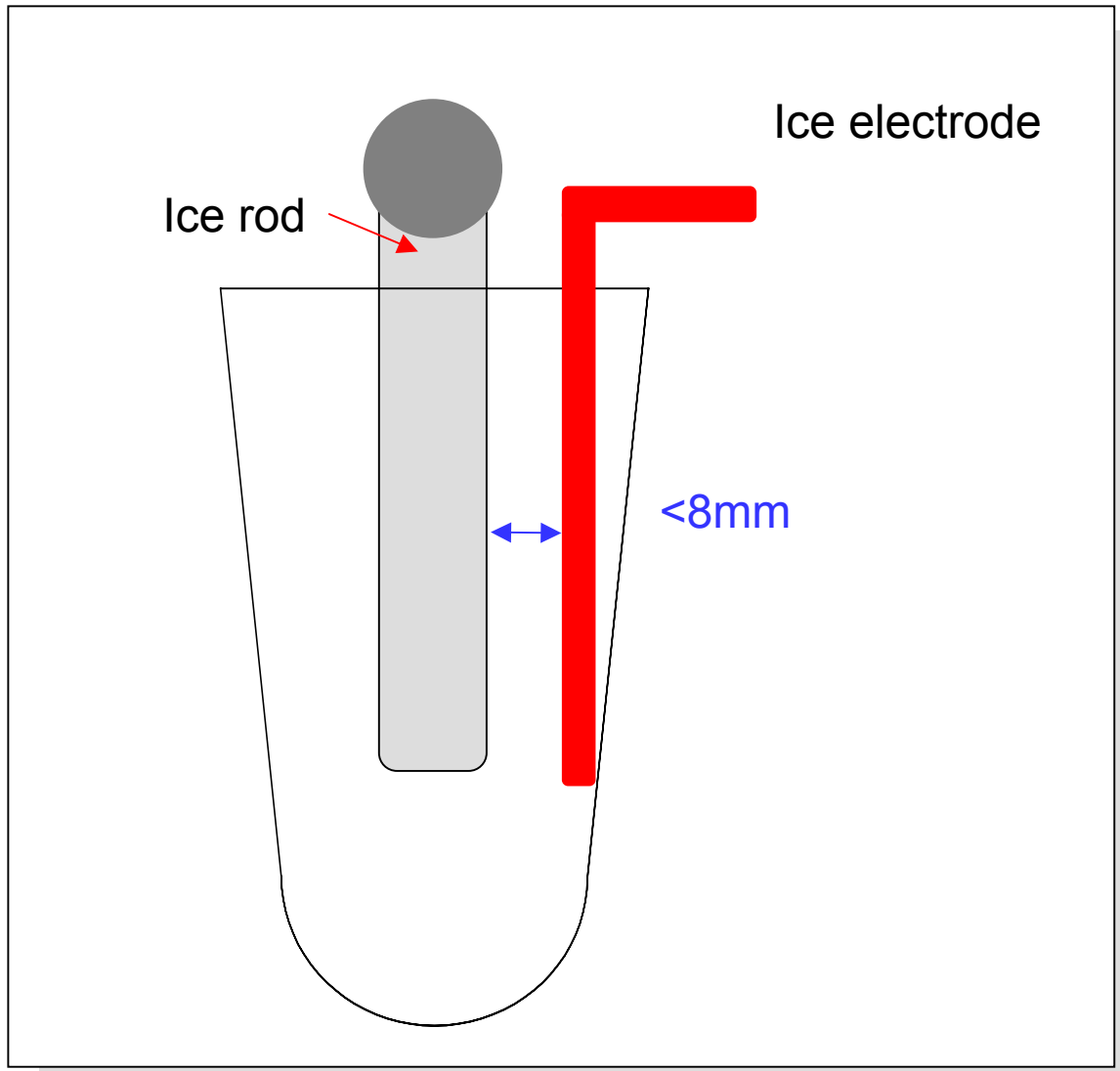


1. Water electrode
2. Ice electrode
3. Common electrode

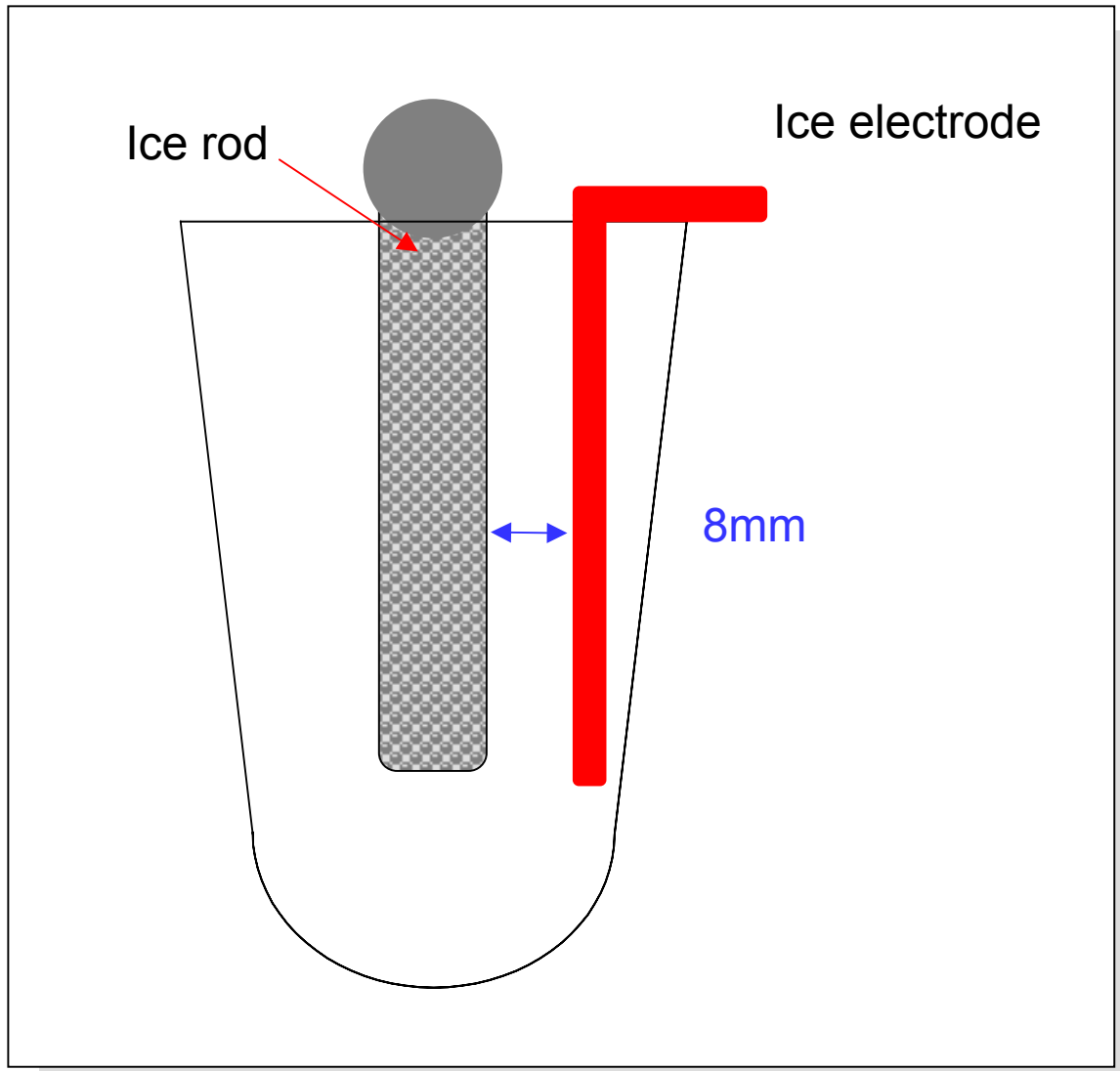
Ice cubes to big



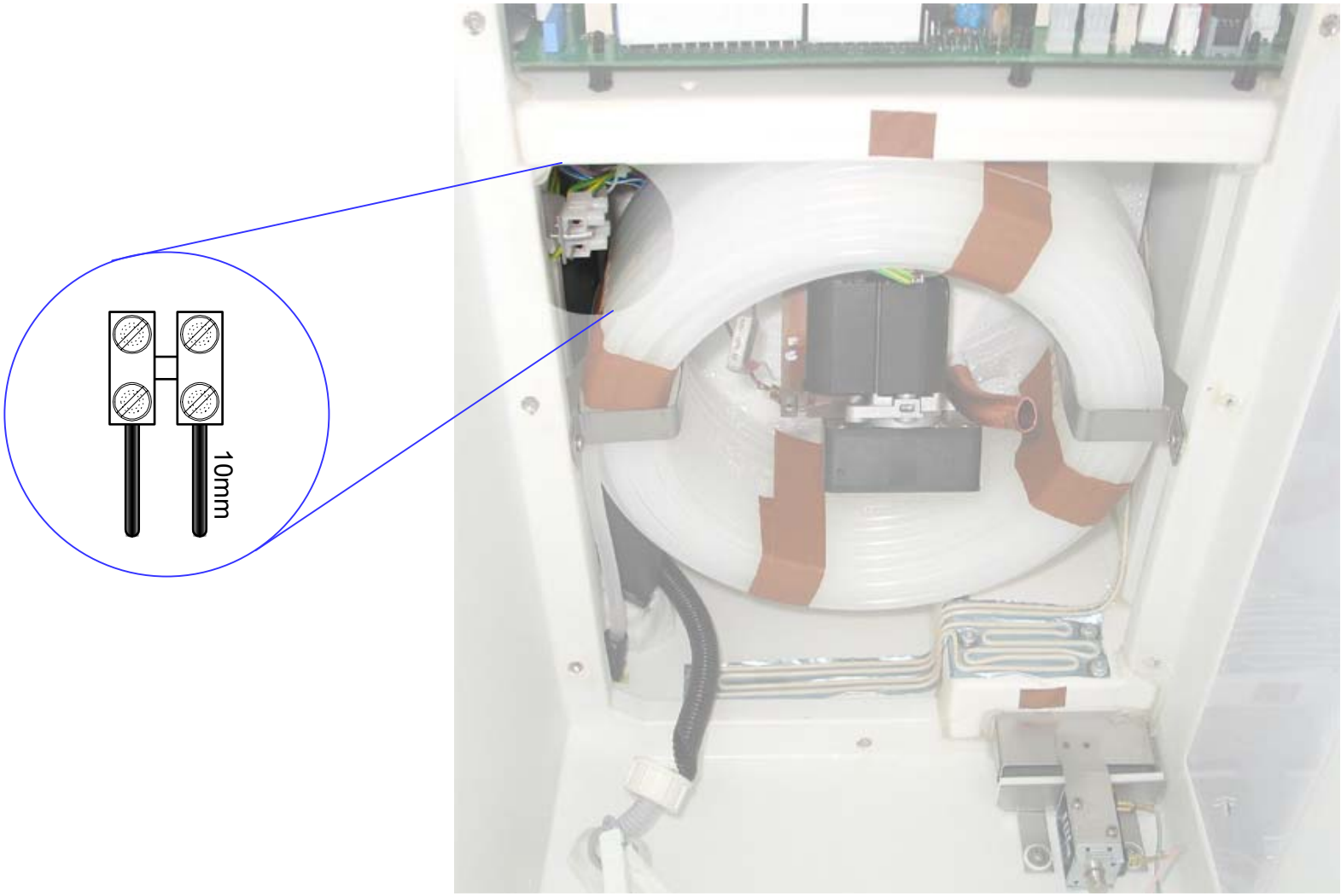
Ice cubes too small



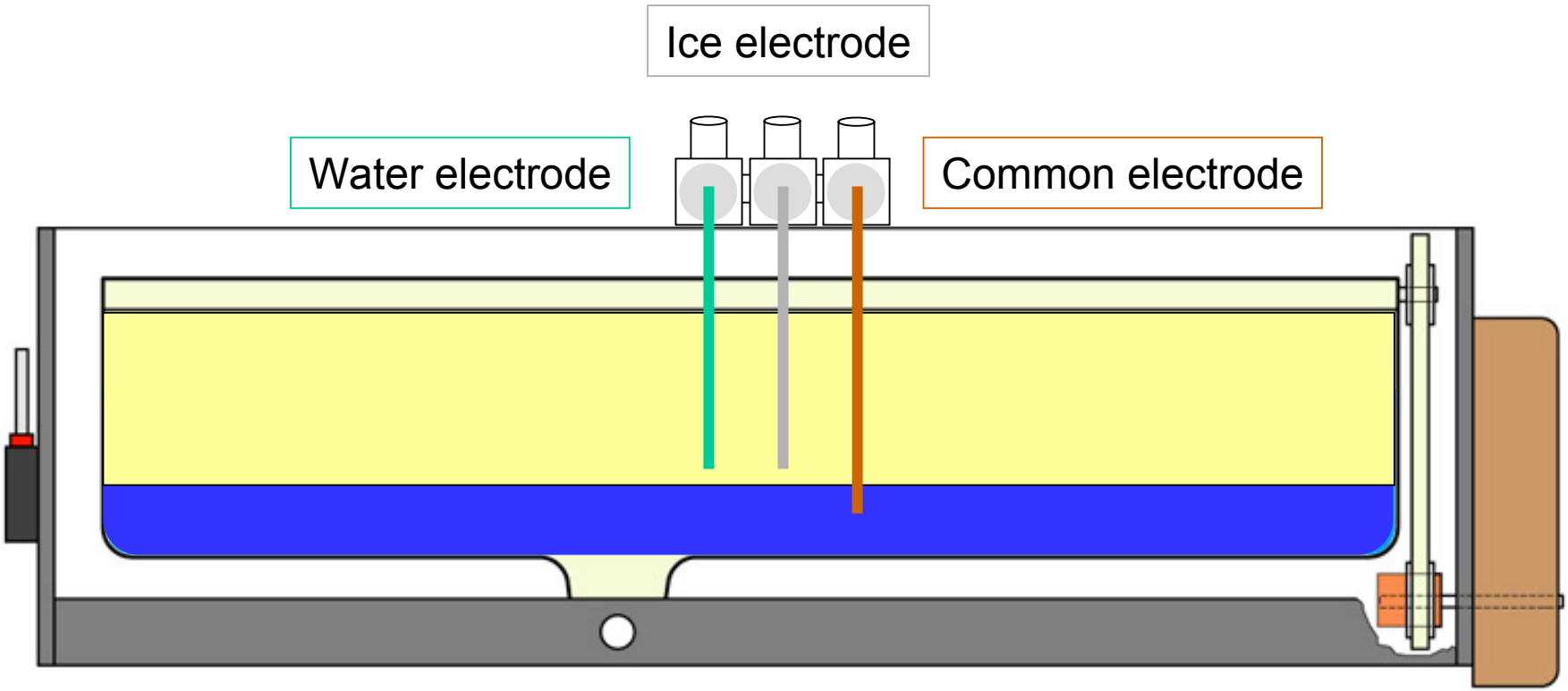
Ice cubes too high and too big



Electrodes on the base of the ice maker

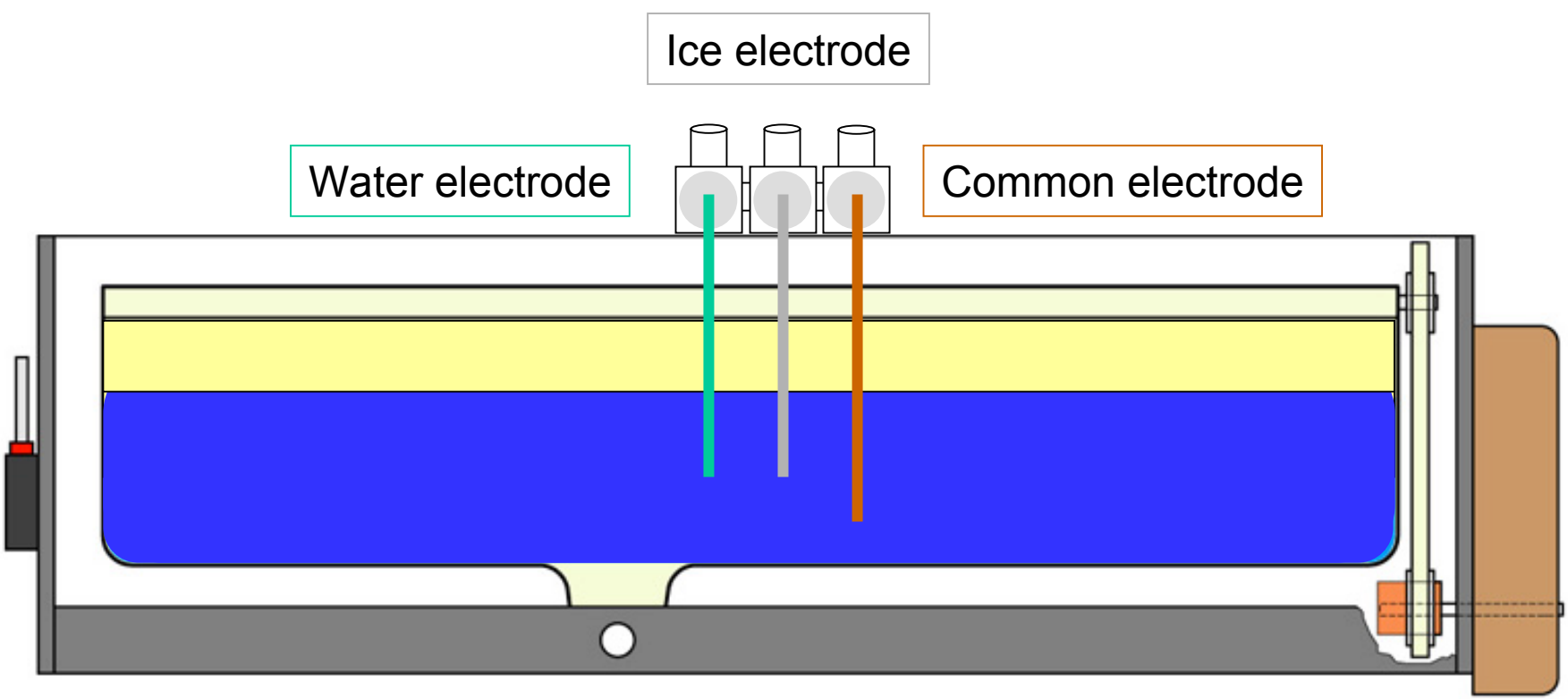


Operation water electrodes



Operation water electrodes

+30%



Operation ice maker

Switch on the ice maker 

transformer of the ice maker is actuated

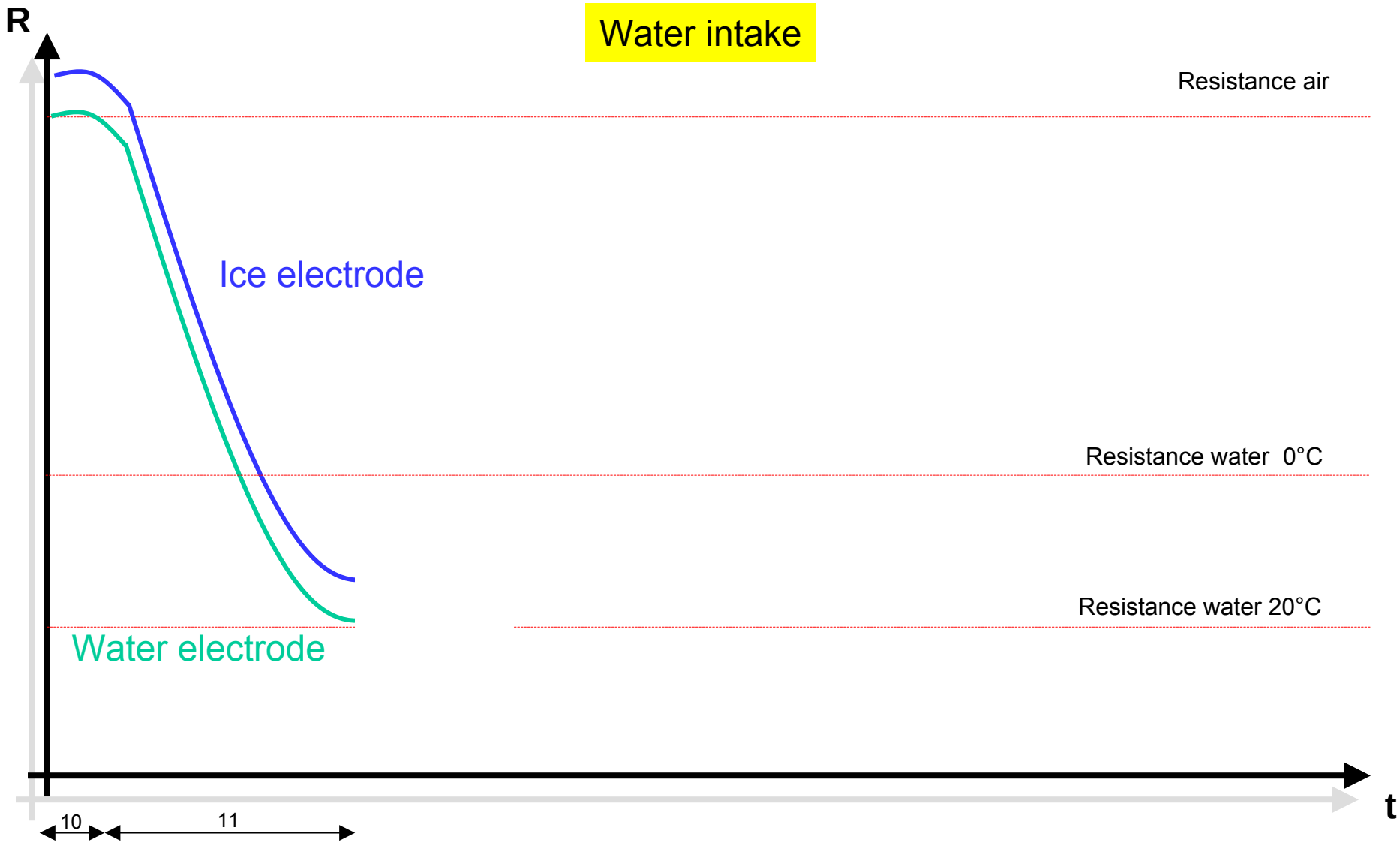
temperature in the ice maker must be warmer than 0 °C

water bowl swings down

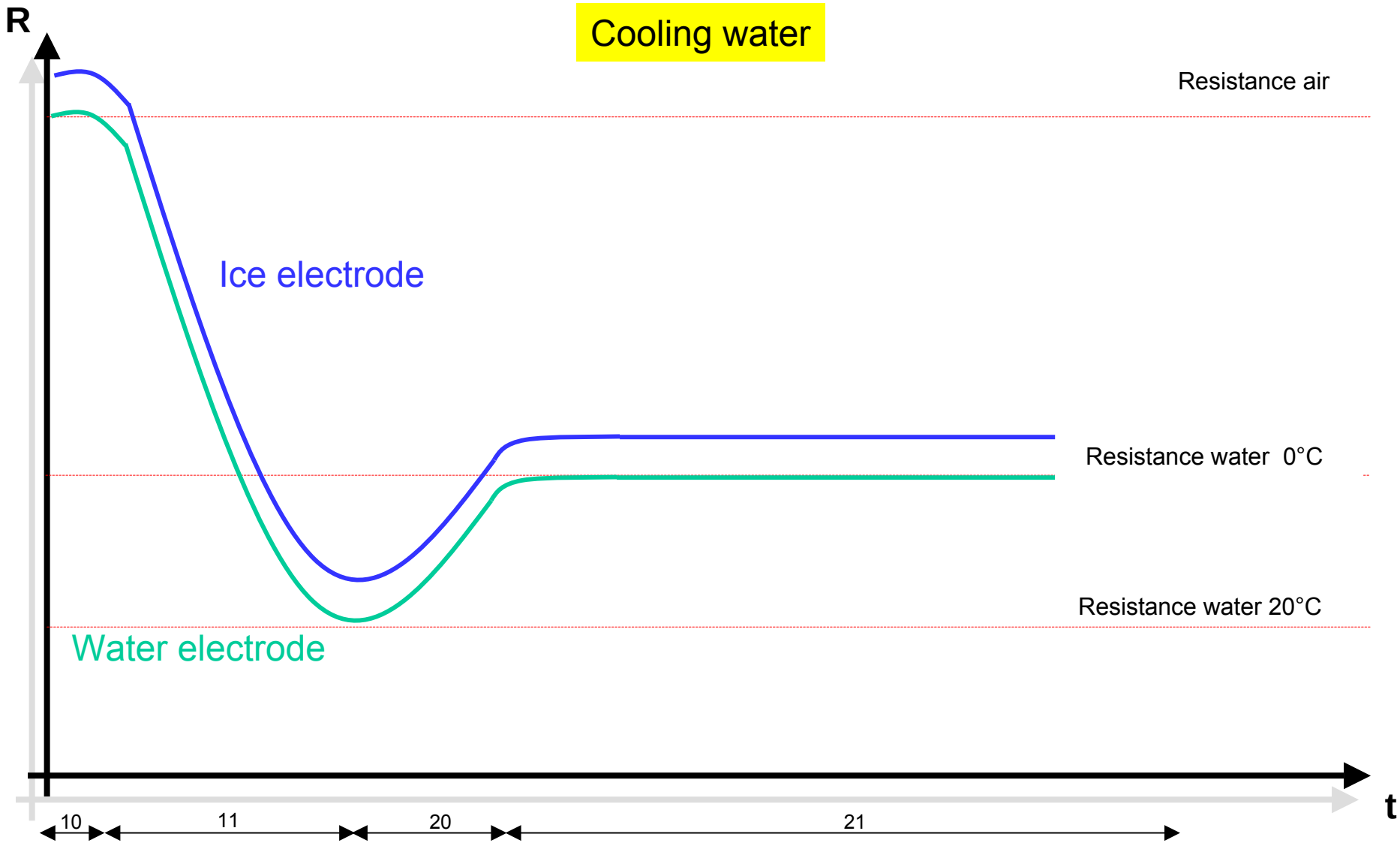
electric heater on the ice rods is actuated

water bowl swings down up

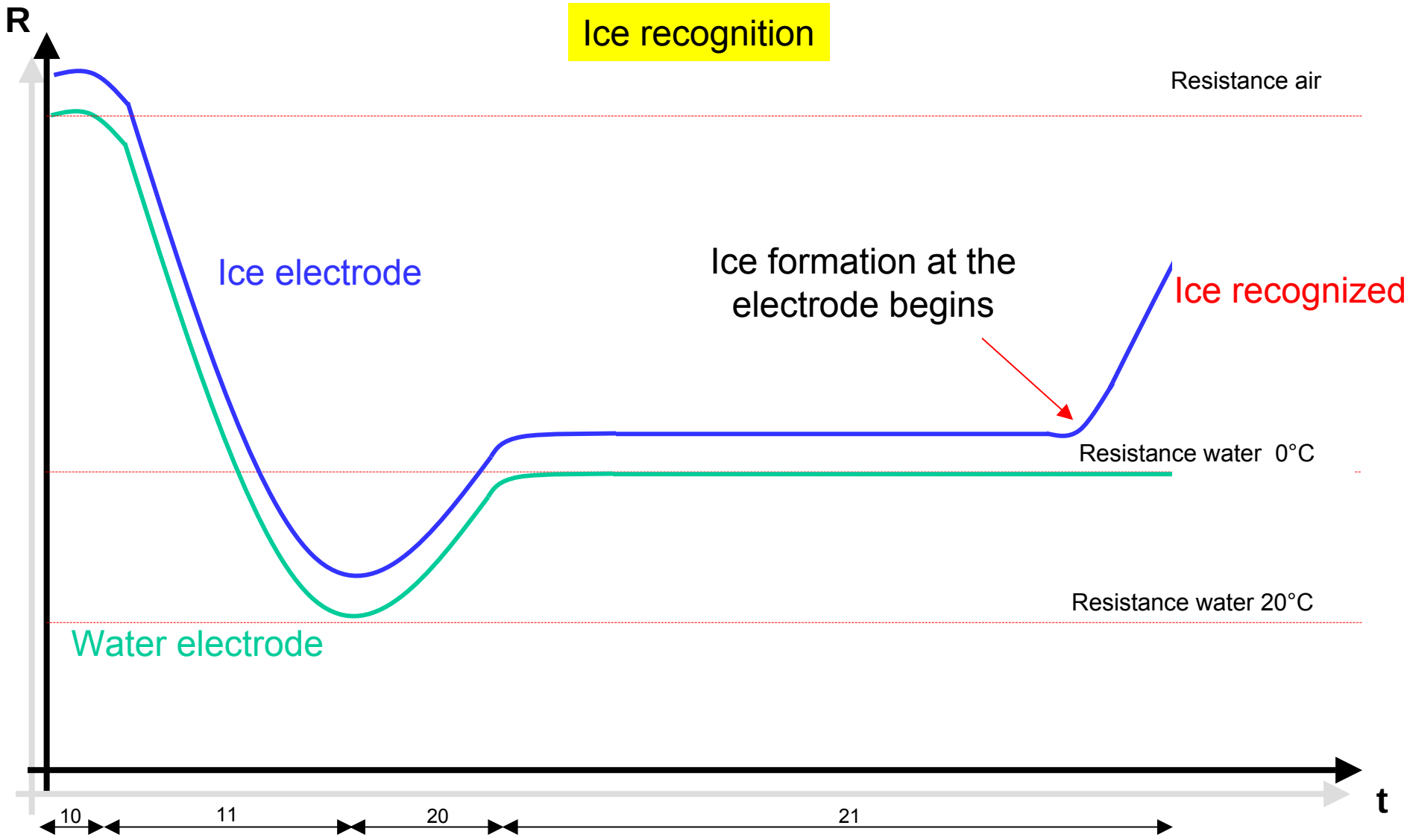
Icemaking process



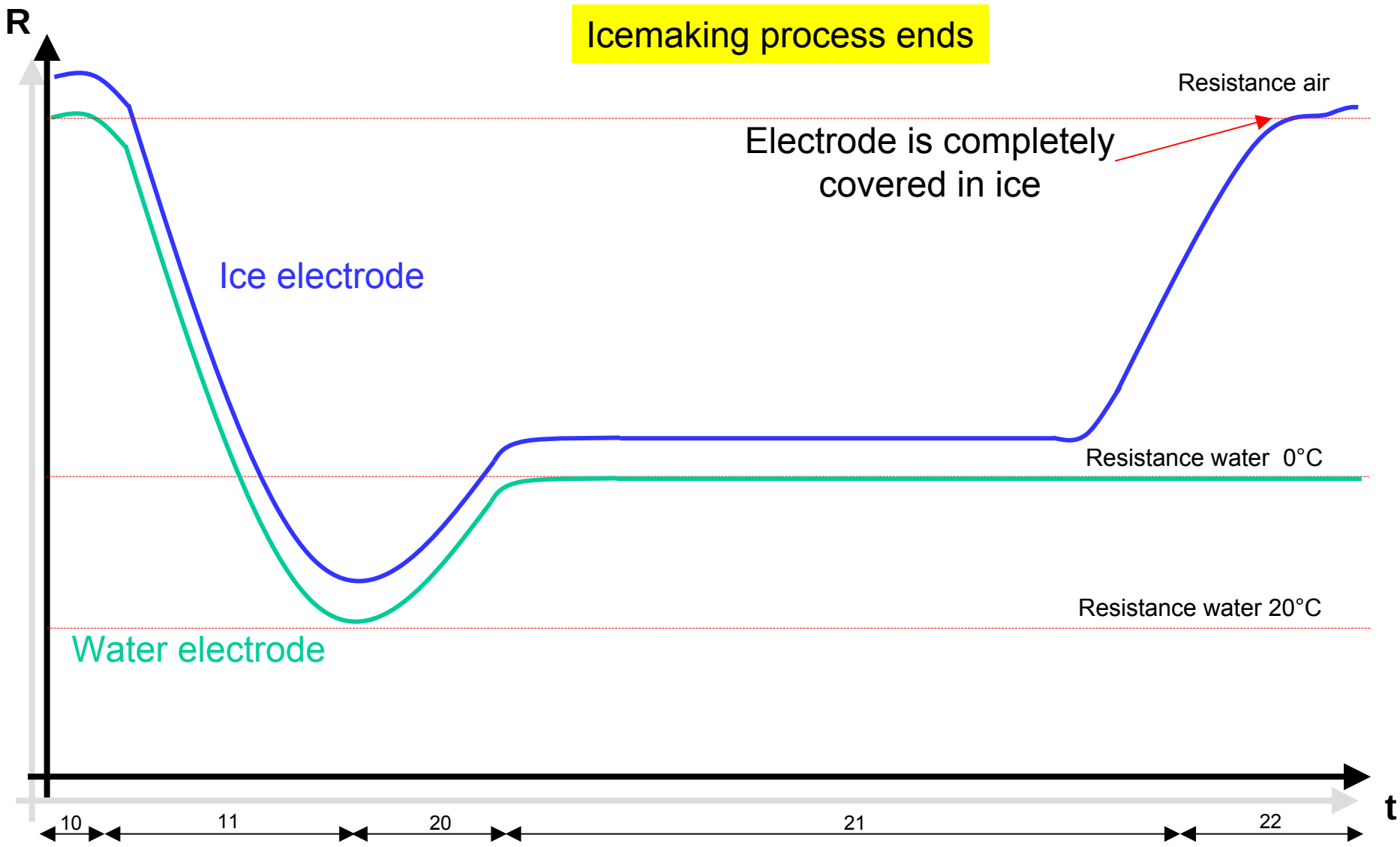
Icemaking process



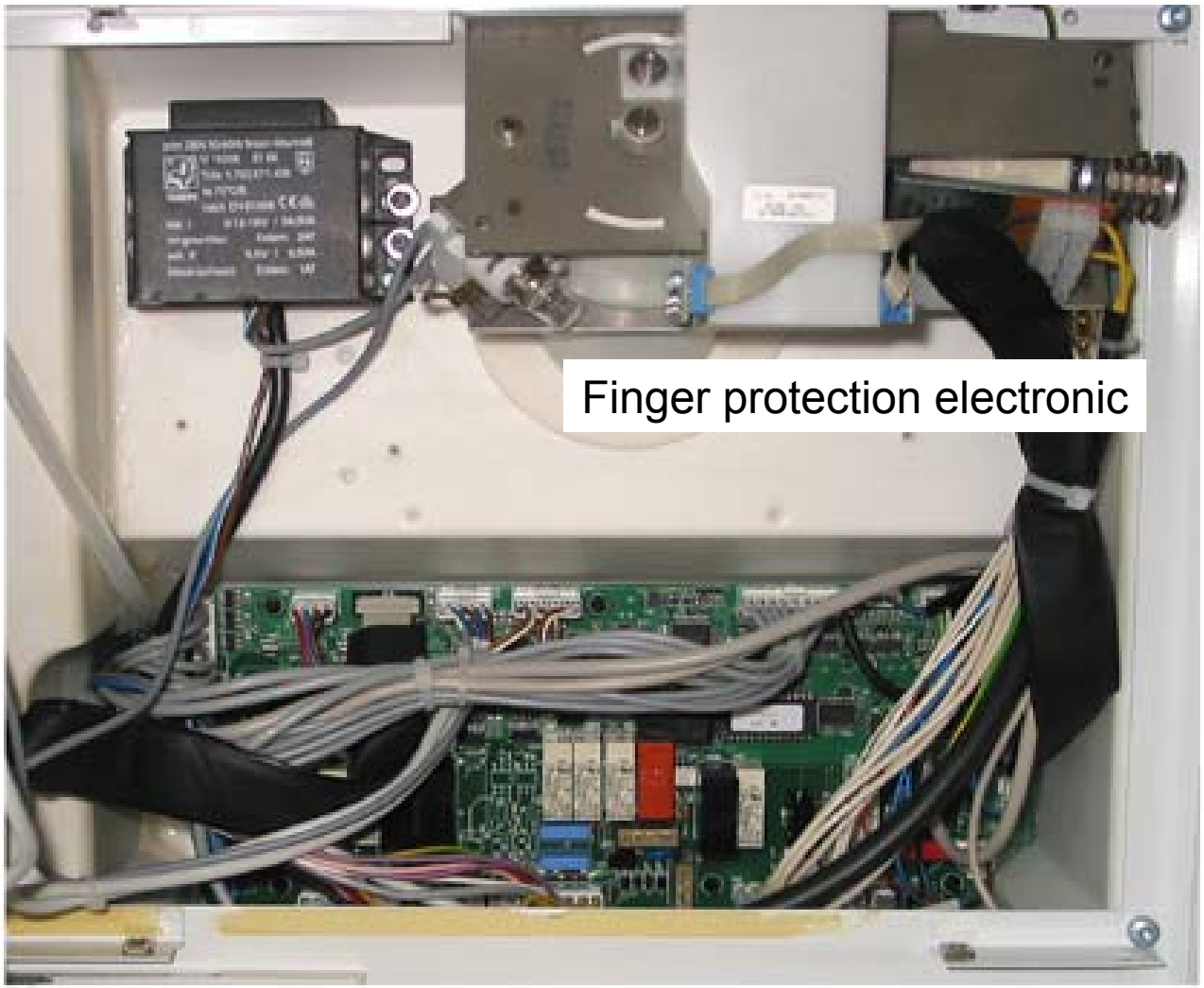
Icemaking process



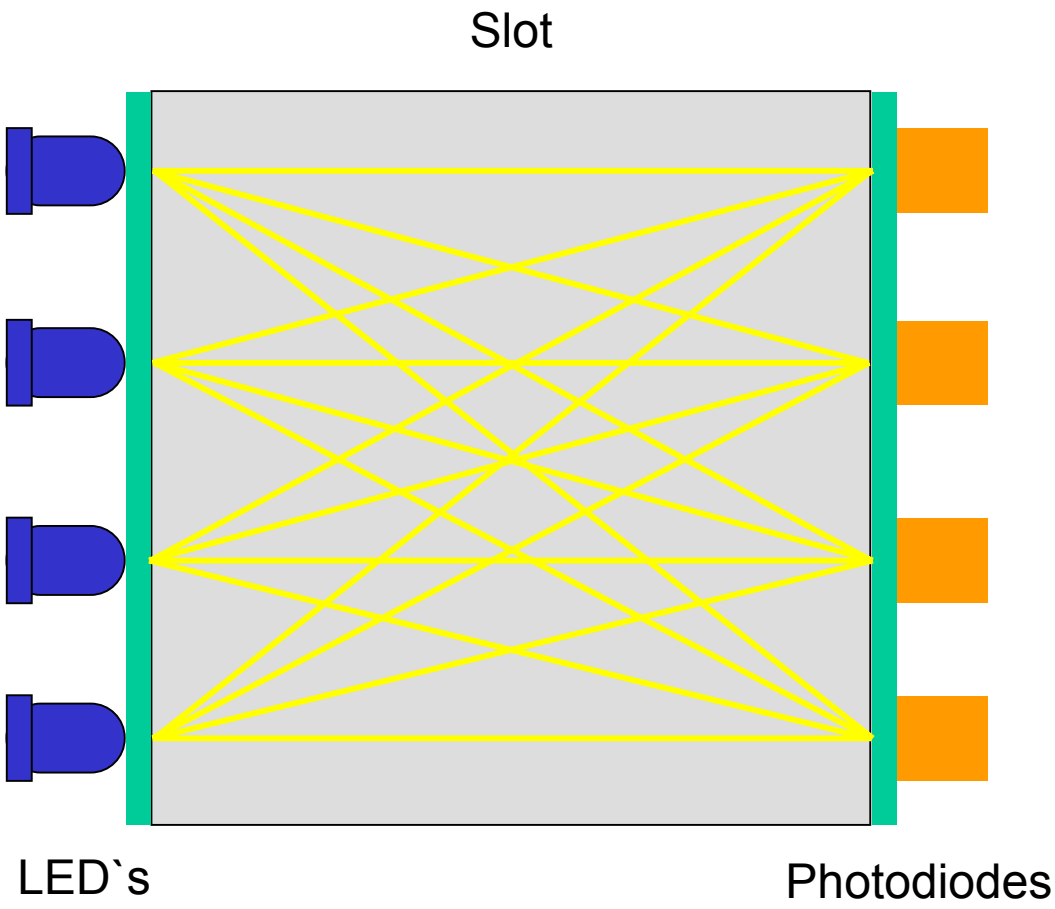
Icemaking process



Finger protection electronics module



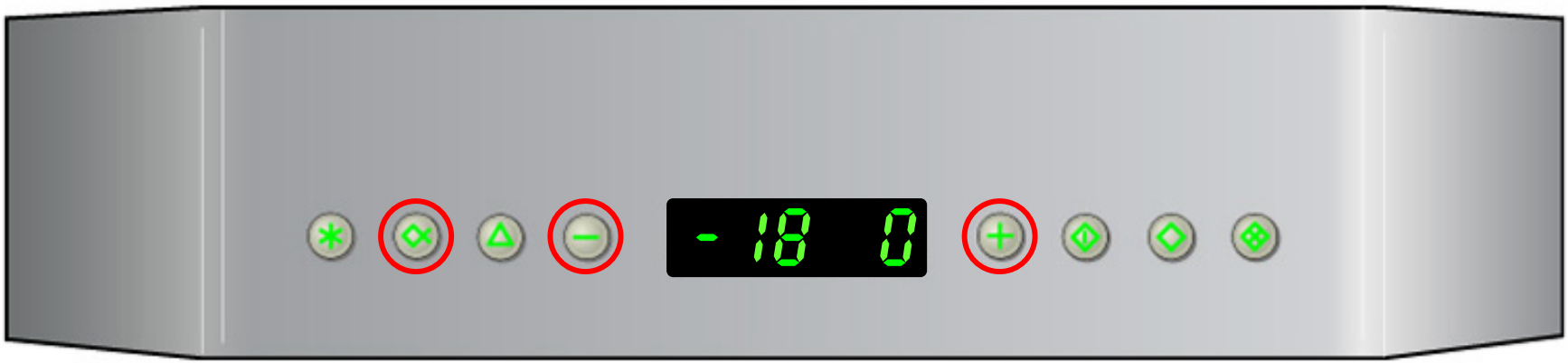
Operation finger protection electronics module



Drinking water preparation

Under the ice maker

Operation “cool-fresh” compartment

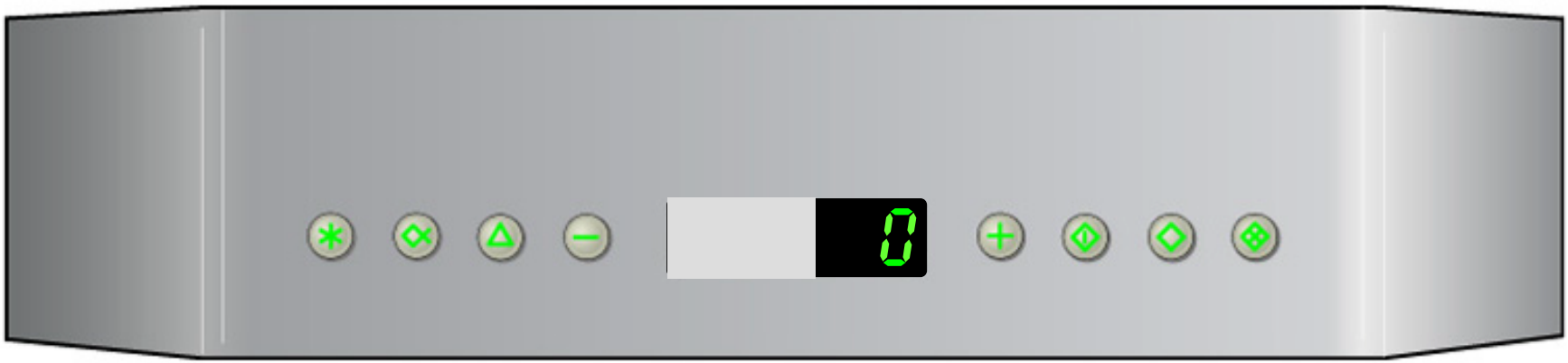


Switch to the temperature indication for the “cool-fresh” comp.

Temperature setting

Setting range 1°C to 8°C

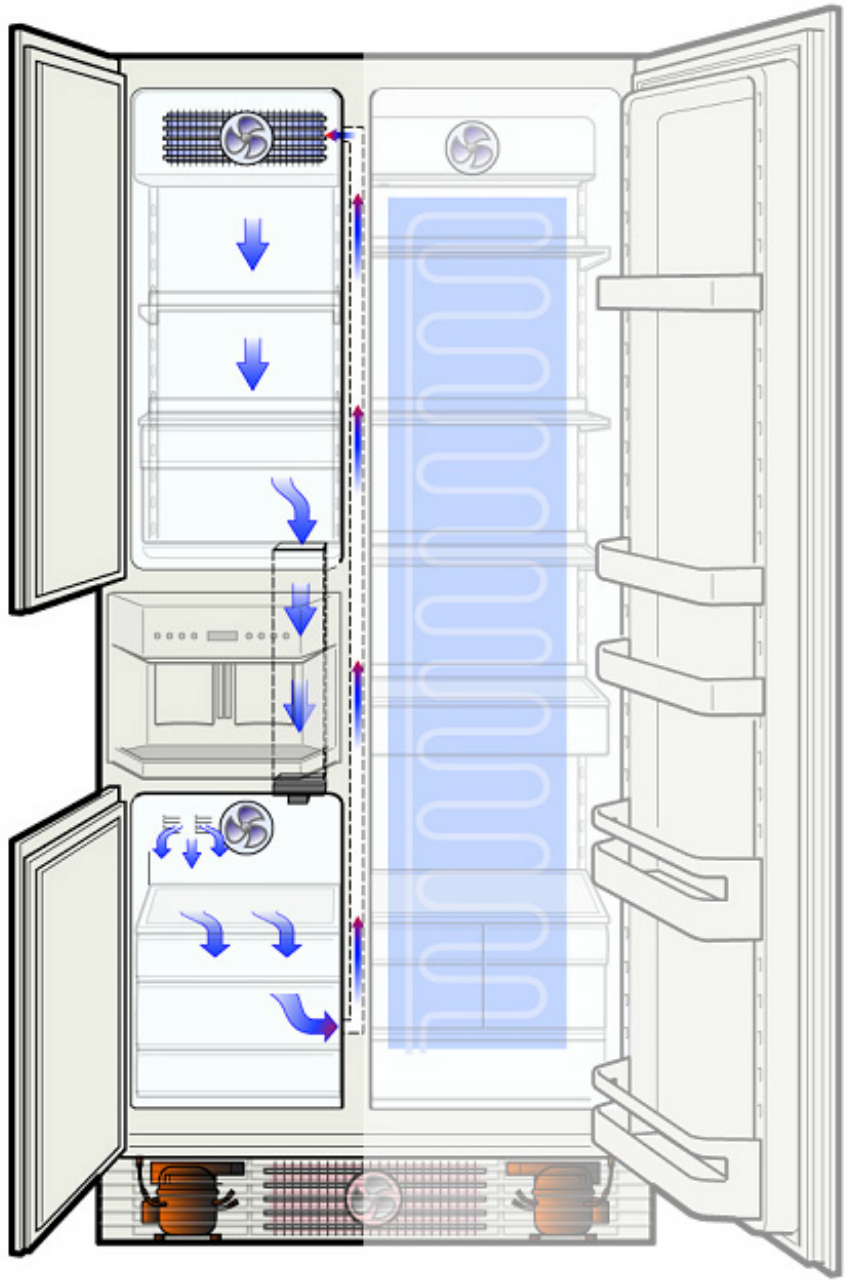
Temperatur display “Cool-fresh” compartment



required temperature is displayed

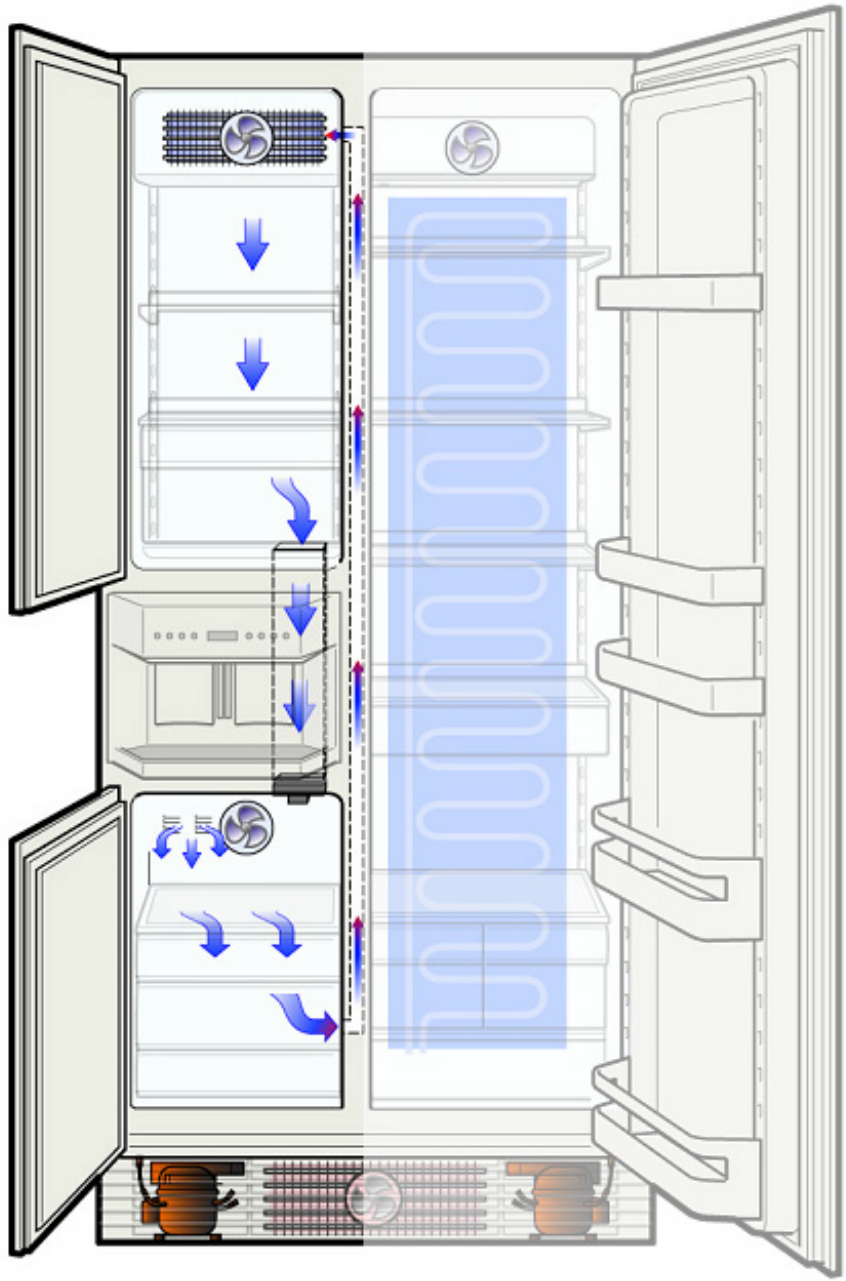
“Cool-fresh” compartment temperature control

- refrigerated with cold air from the freezer
- Fan for air circulating
- Electromechanical air flap

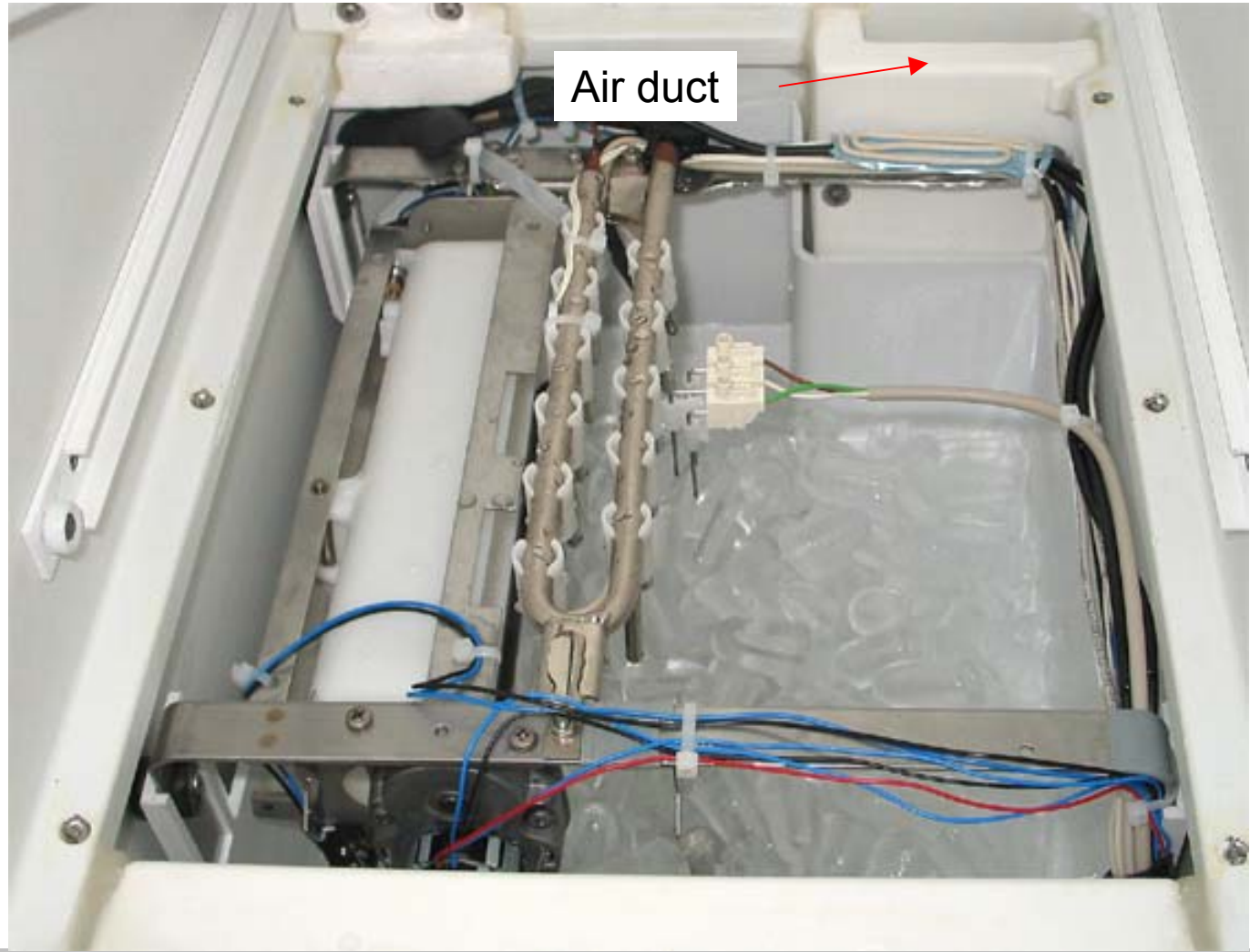


Operation “cool-fresh” compartment

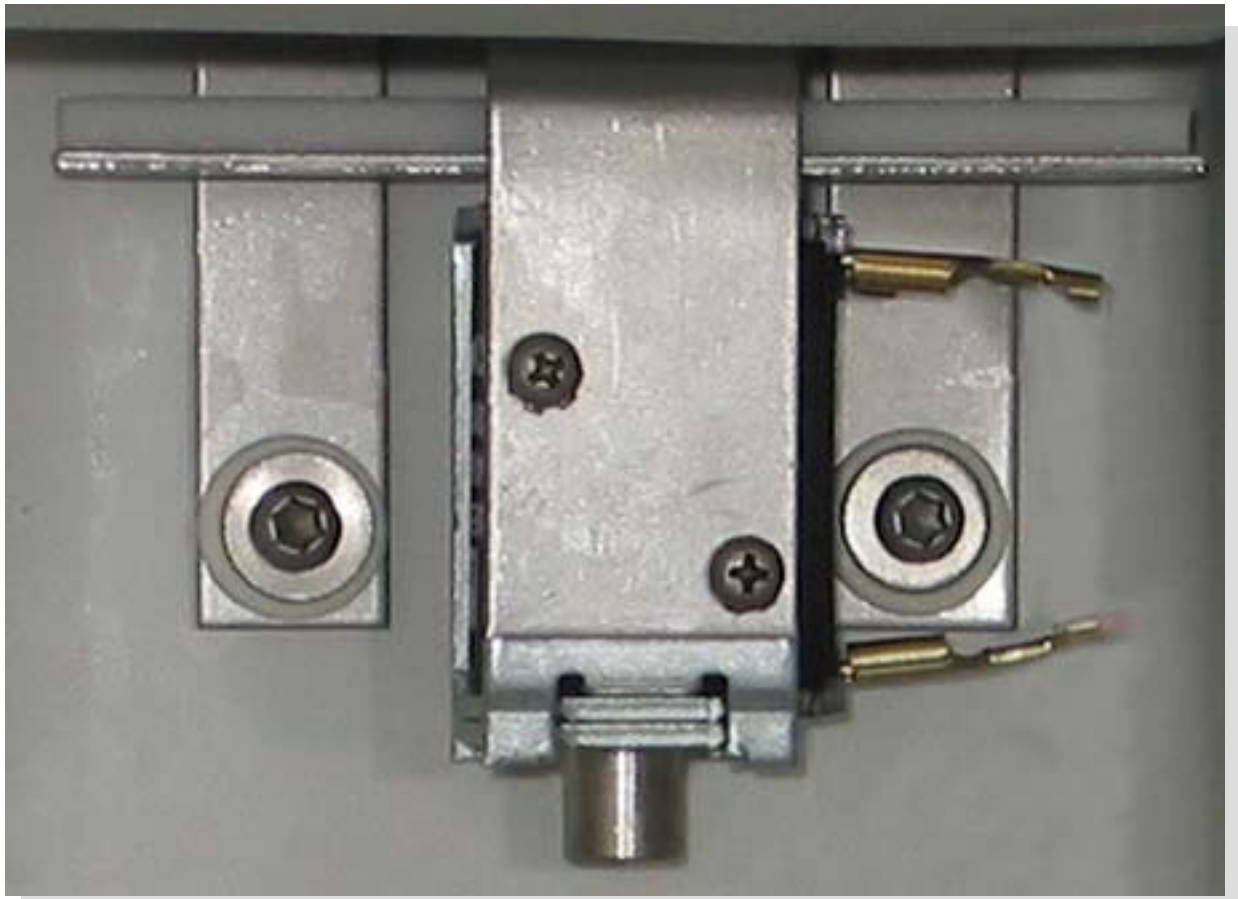
- Supply airduct behind ice maker
- Return airduct in the partition to the refridgerator compartment



Airduct behind the ice maker



Electromechanical air flap



Freezer compartment

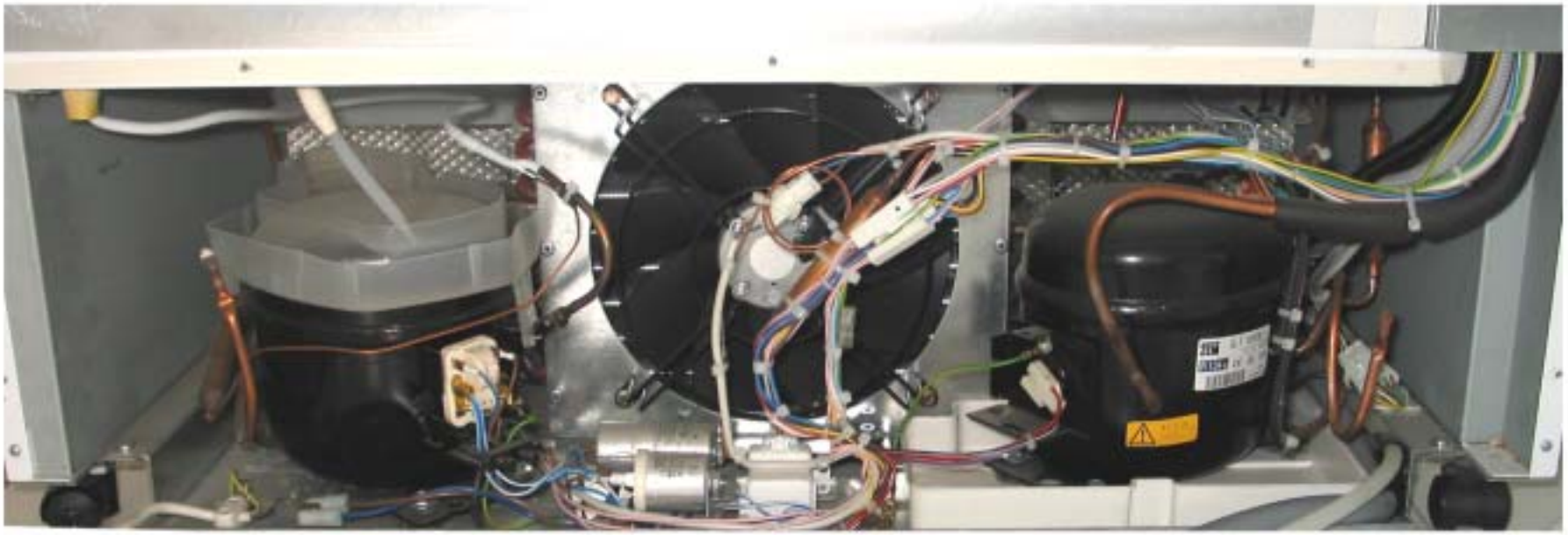
Return airduct

“cool-fresh” compartment

Fan in the “cool-fresh” compartment

Motor compartment

Condenser



Compressor refridgerator compartment

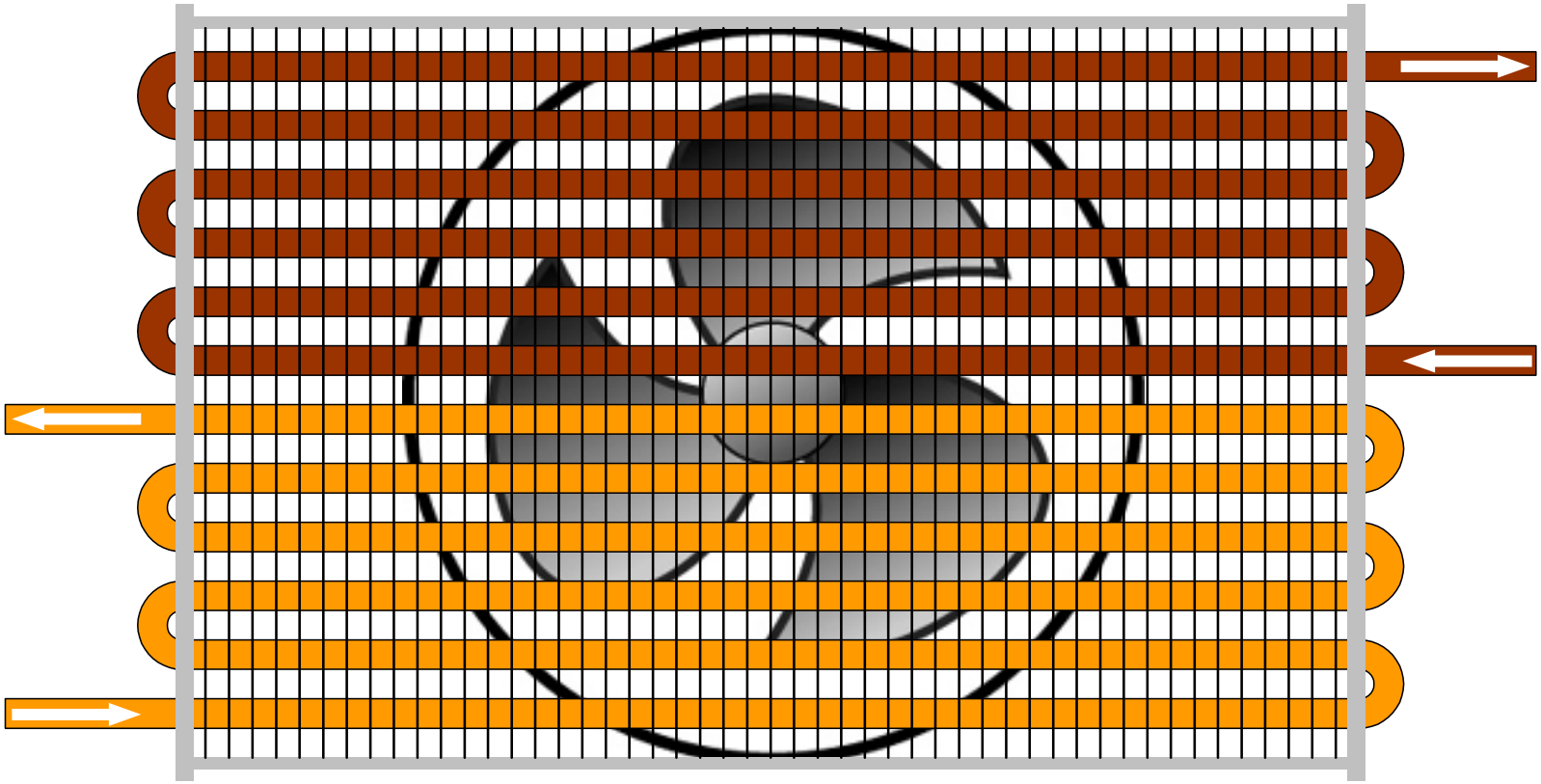
Refrigerant solenoid valve

Compressor freezer compartment

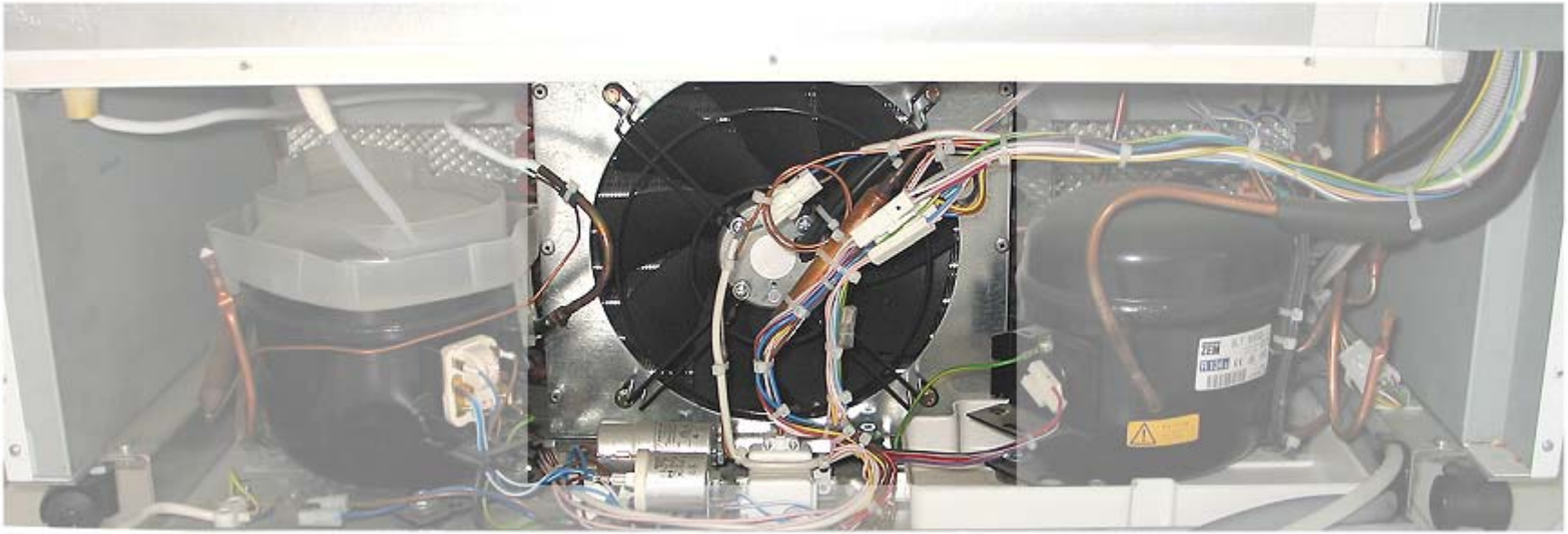
backside

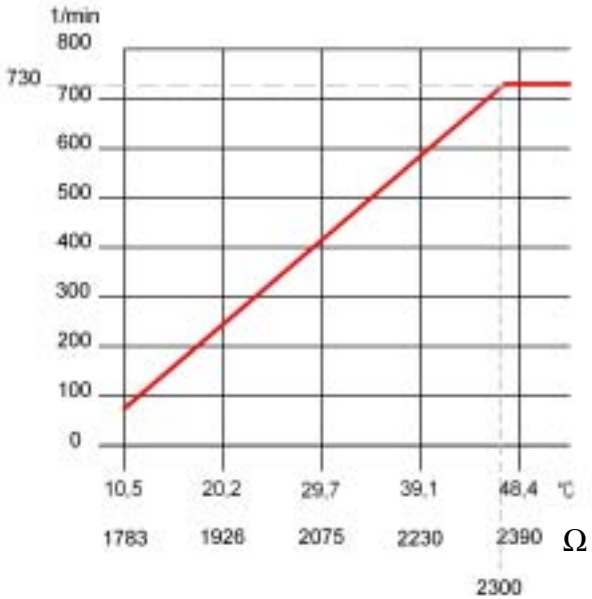
Condenser

Refridgerator compartment



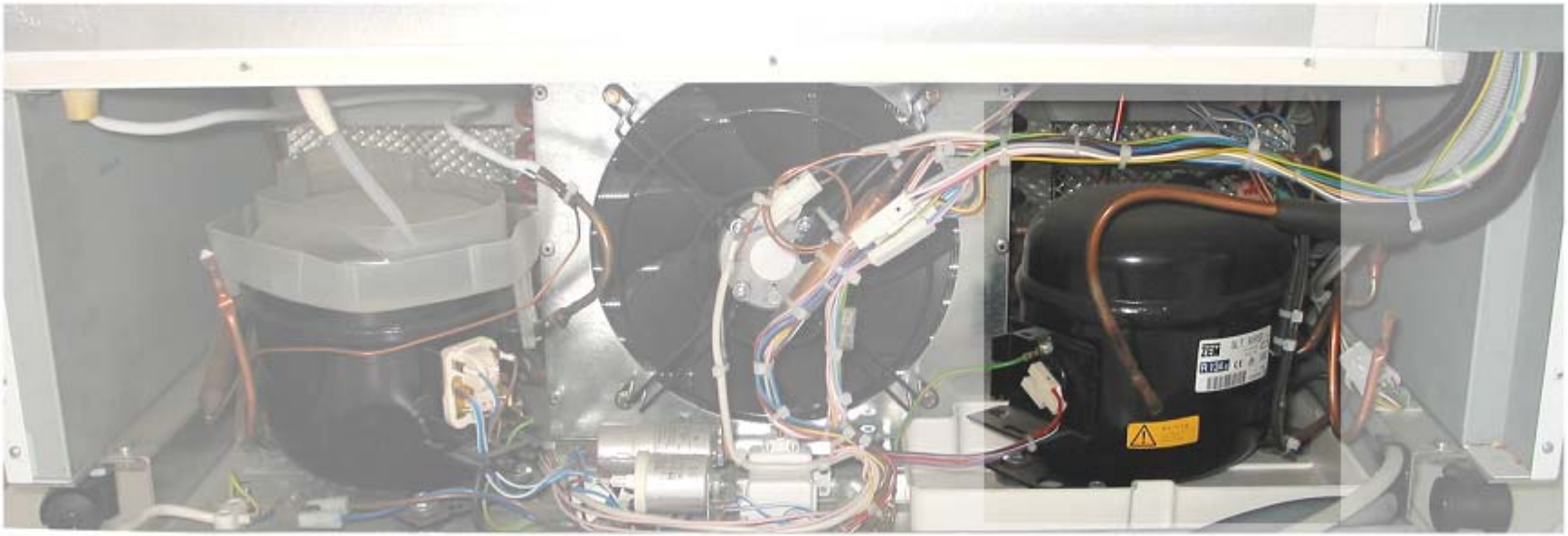
Freezer compartment



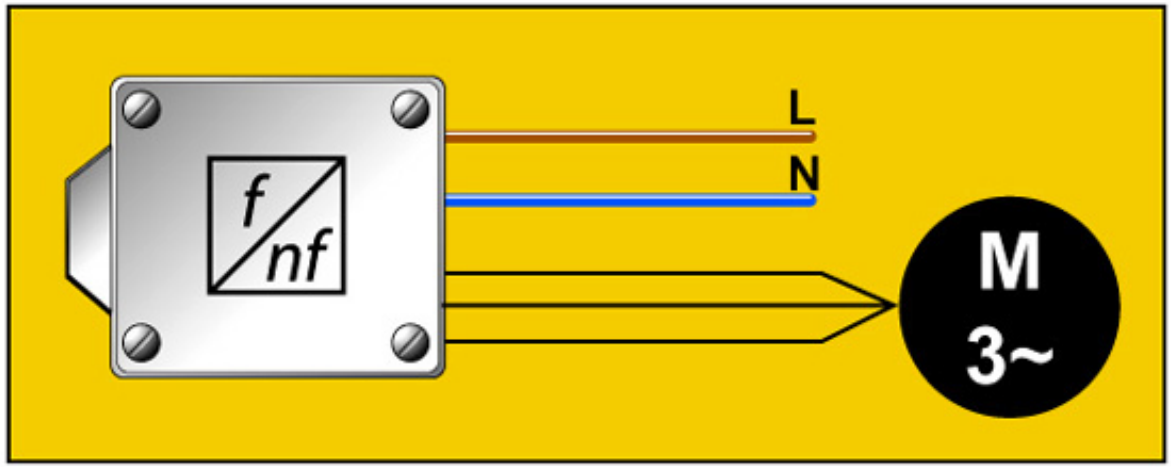


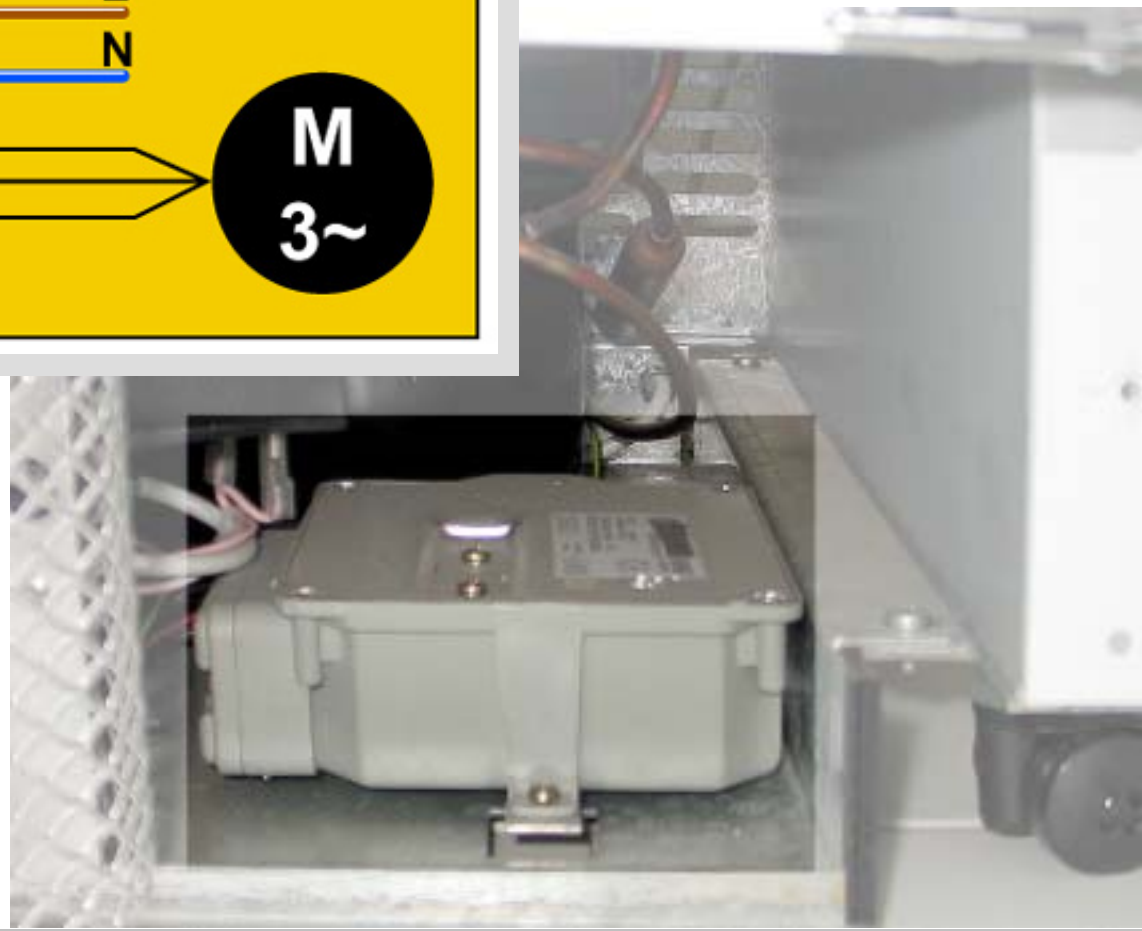
Condenser fan

Compressor freezer compartment

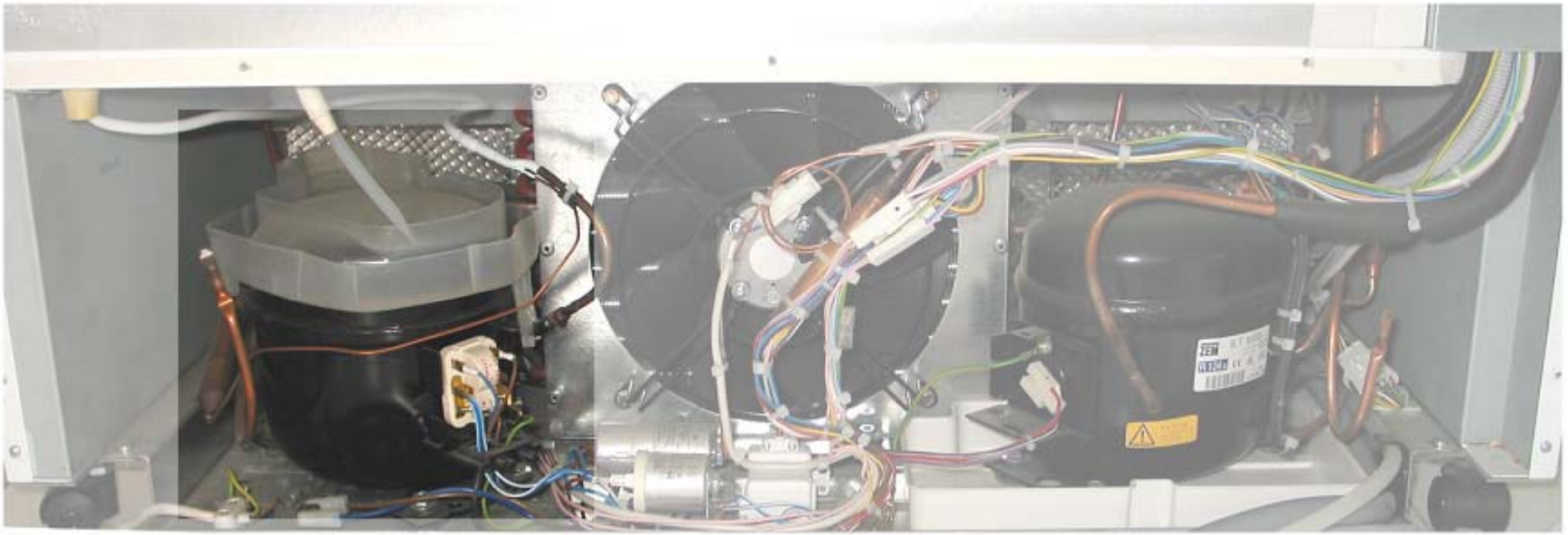


Actuation freezer compartment compressor





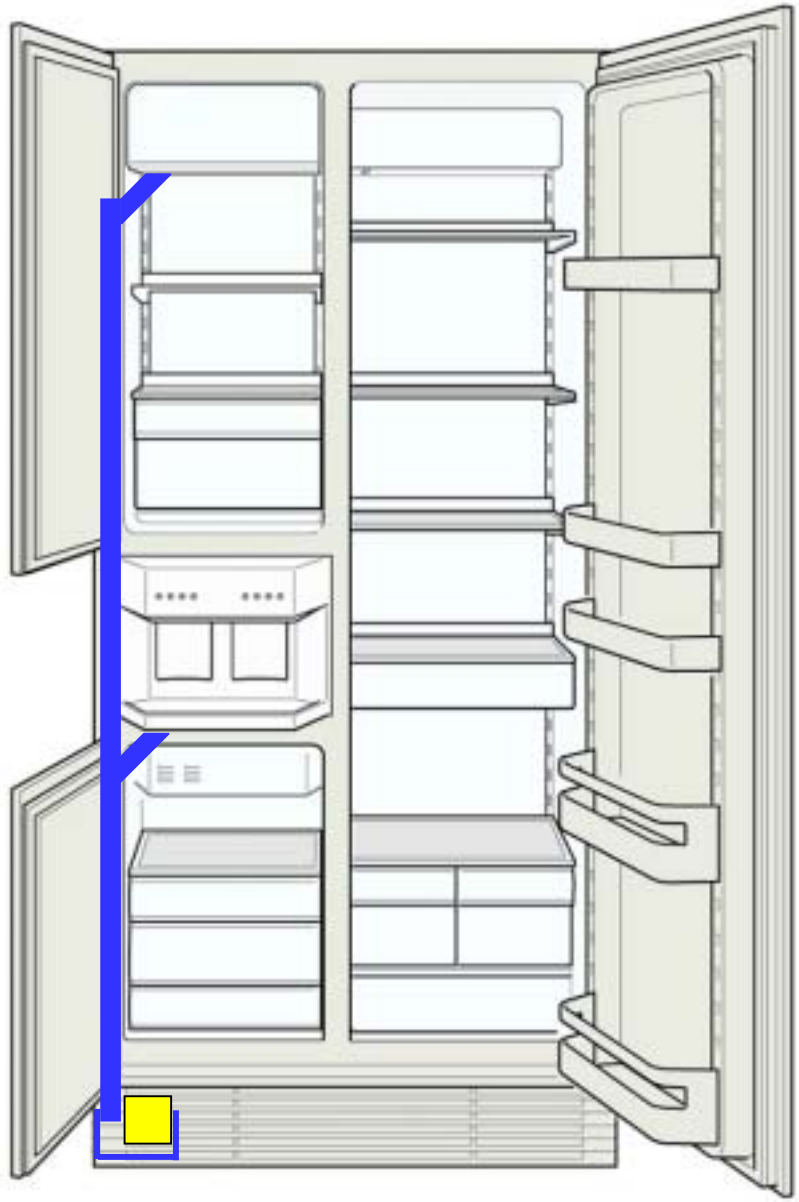
Refridgerator compartment compressor



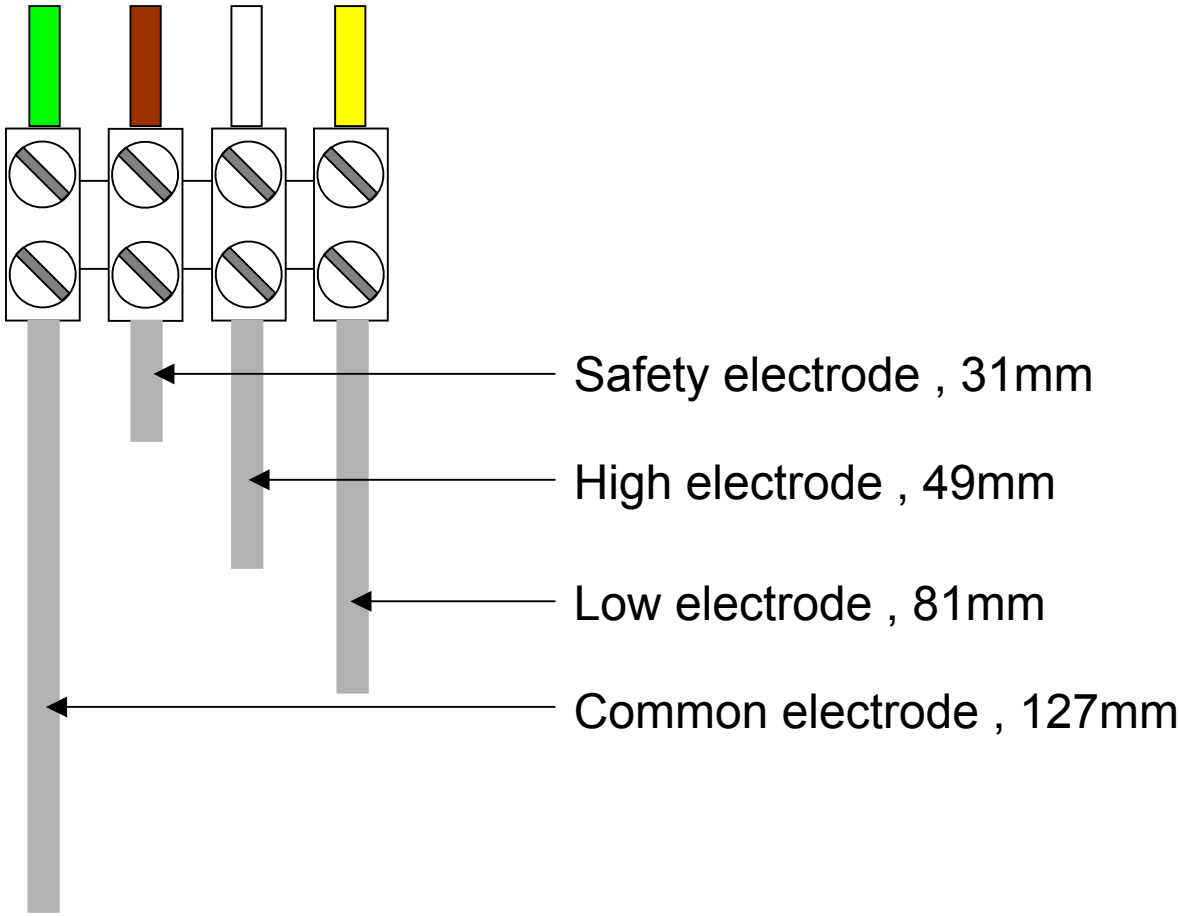
Waste water pump

Waste water guidance

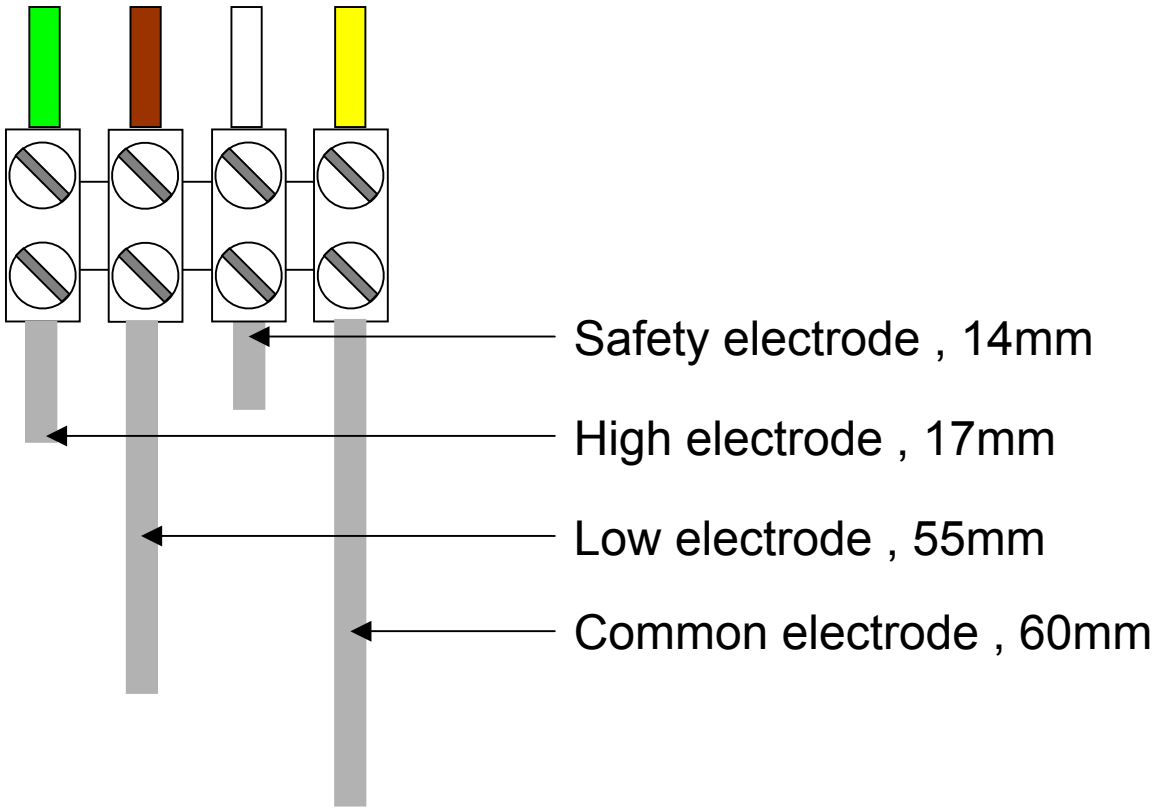
Condensation water of the freezer compartment



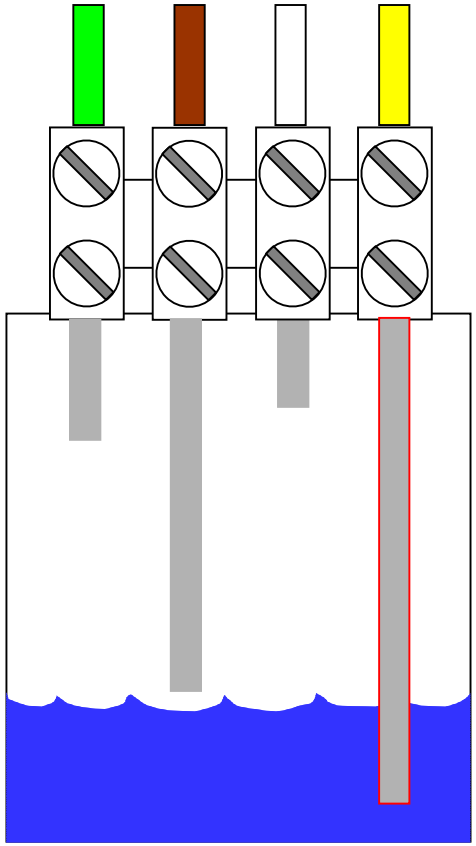
Water electrodes up **KI 21**



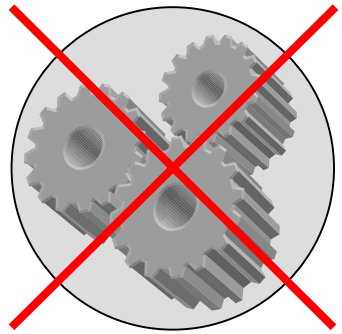
Water electrodes from **KI 22**



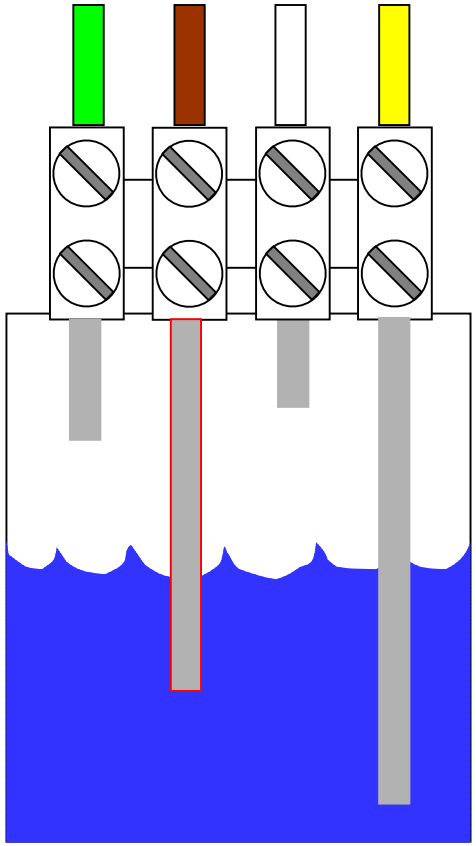
Common electrode in the water



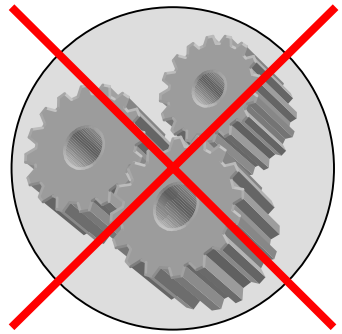
Waste water pump



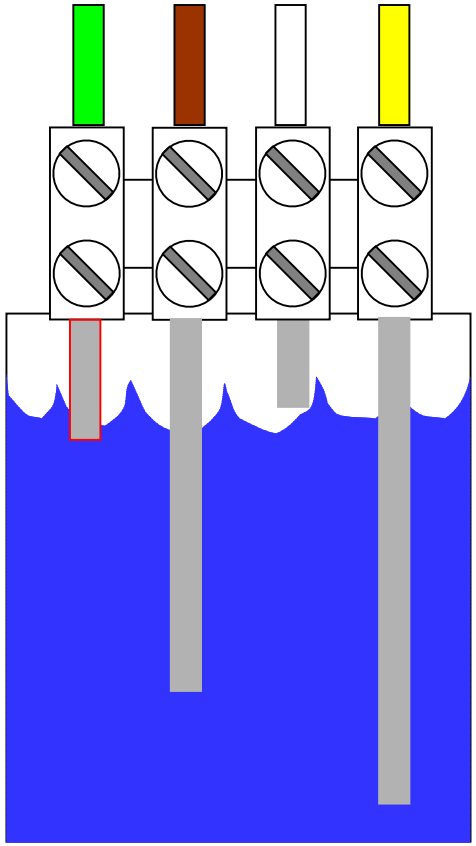
Low electrode in the water



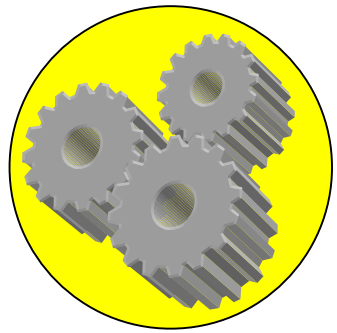
Waste water pump



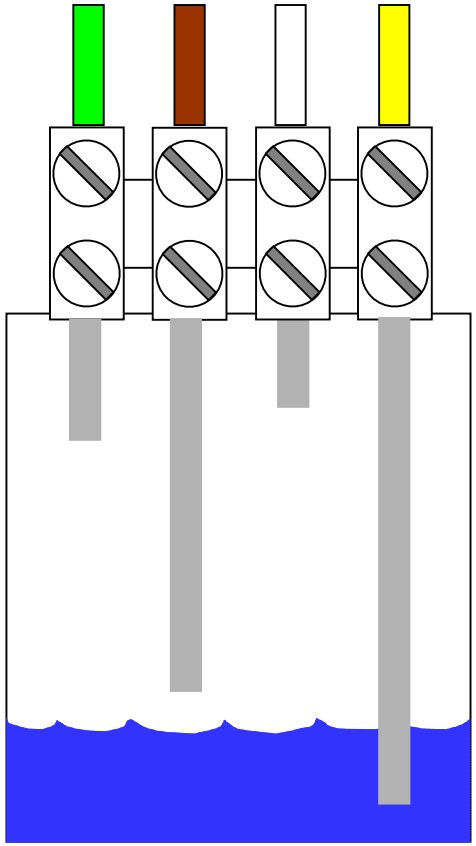
High electrode in the water



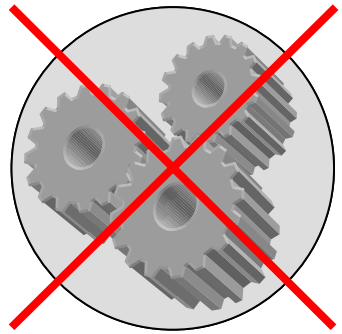
Waste water pump



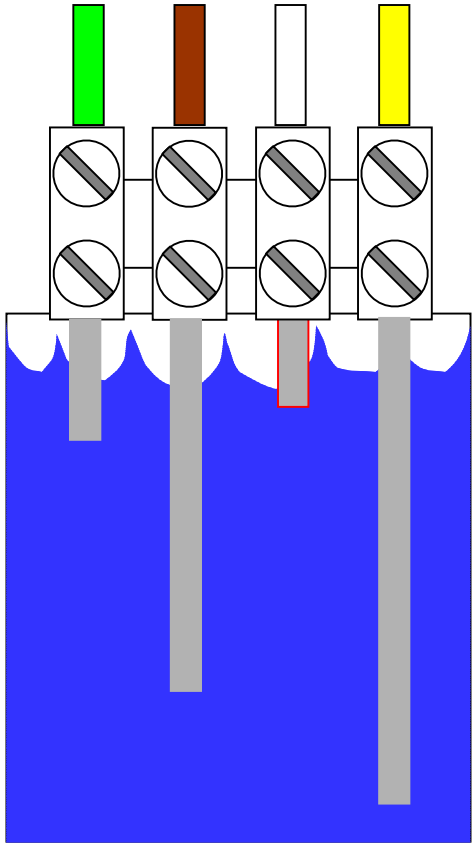
Water tank empties



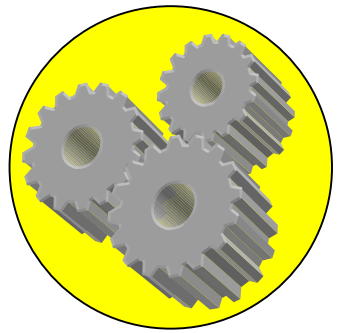
Waste water pump



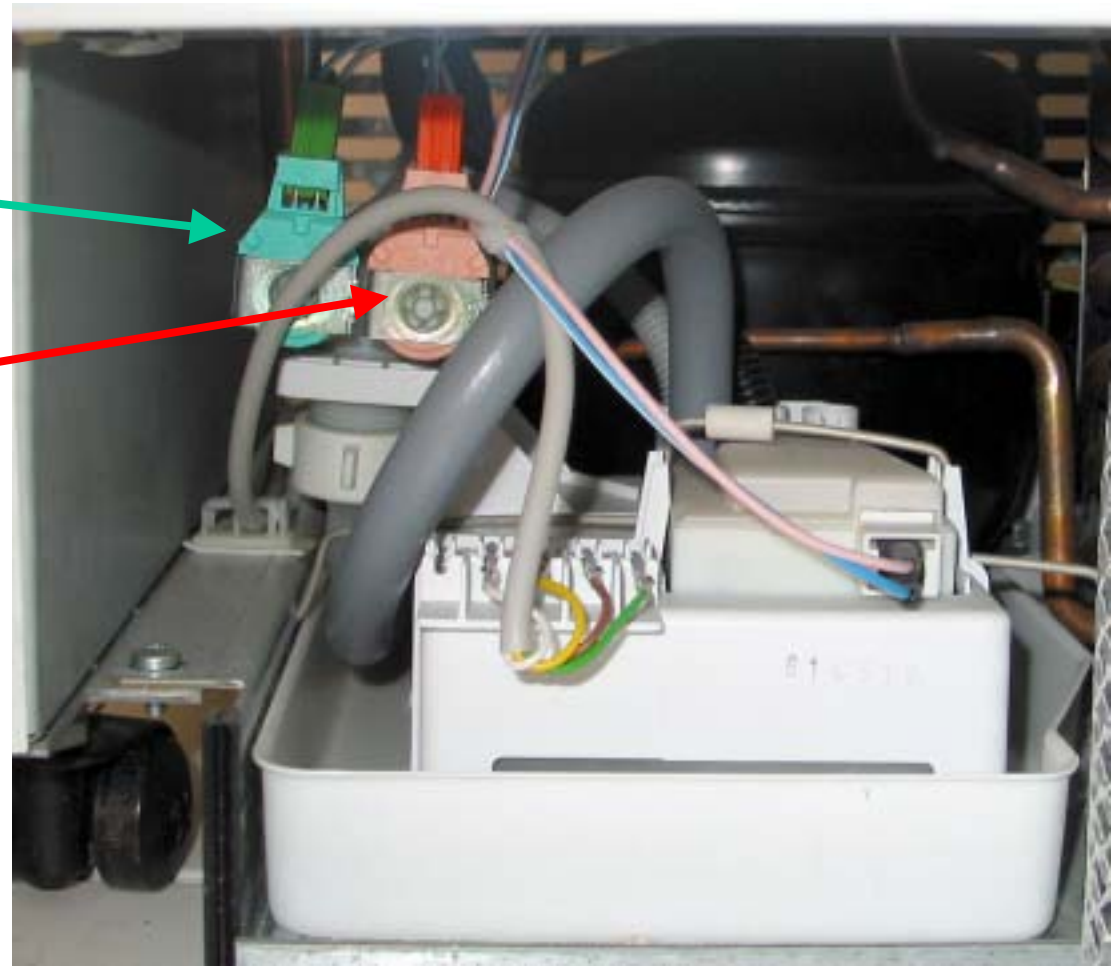
Safety electrode in the water



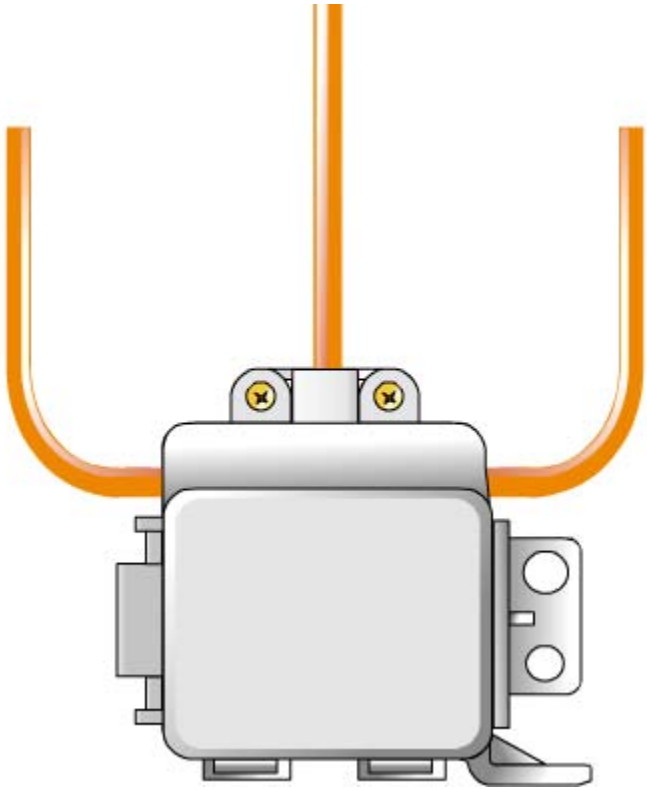
Waste water pump



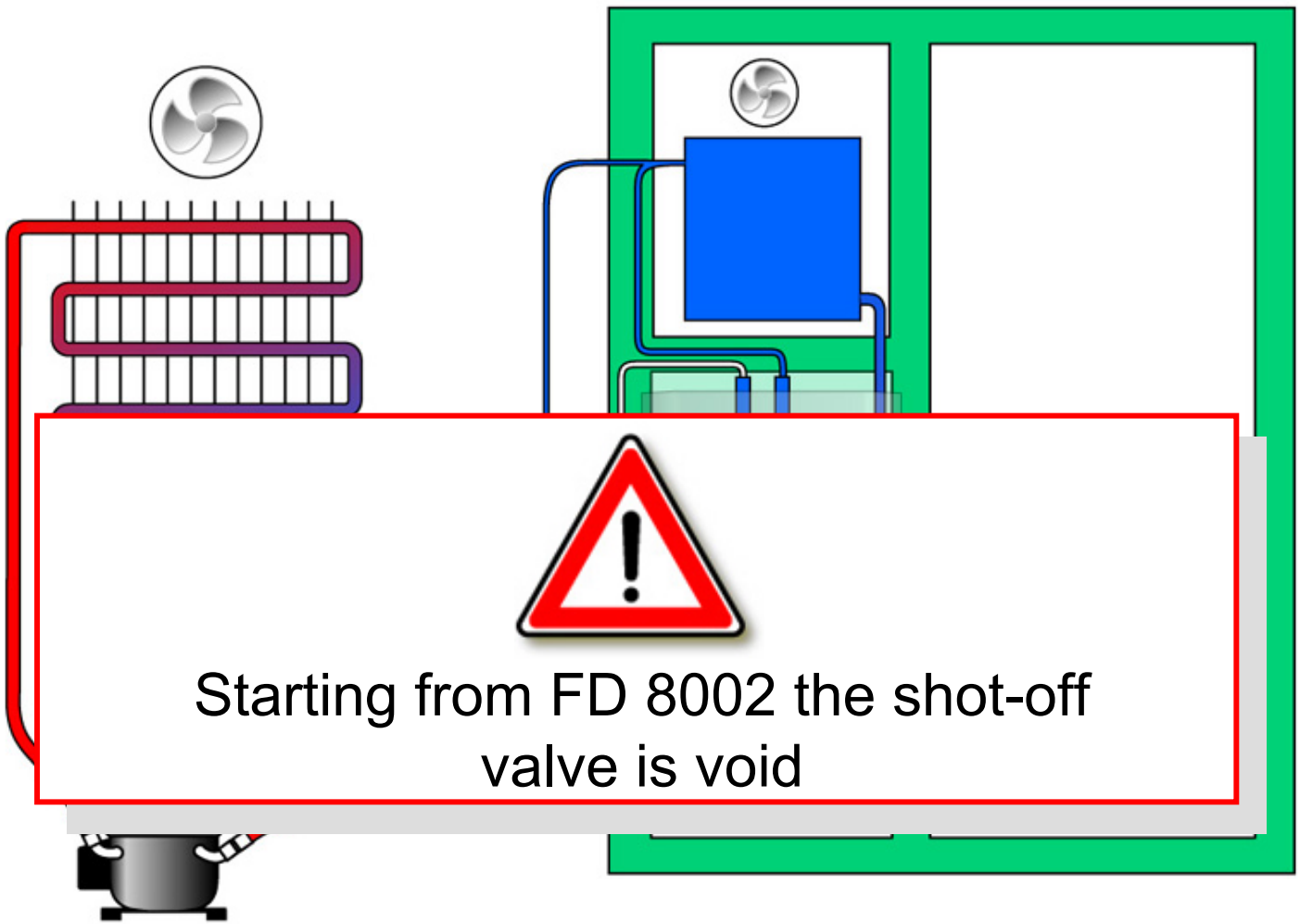
Water solenoid valve



Refrigerant solenoid valve

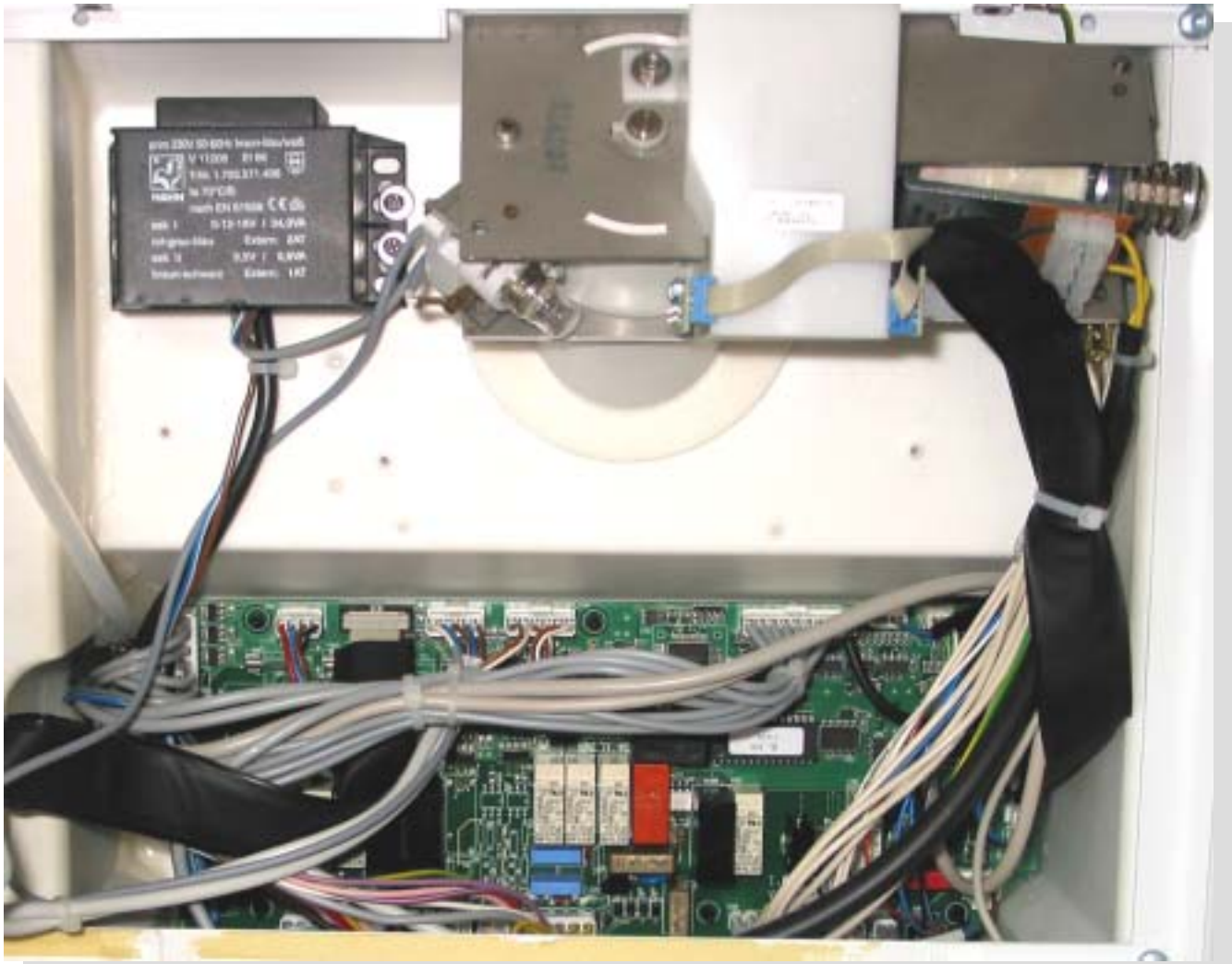


Shot-off valve

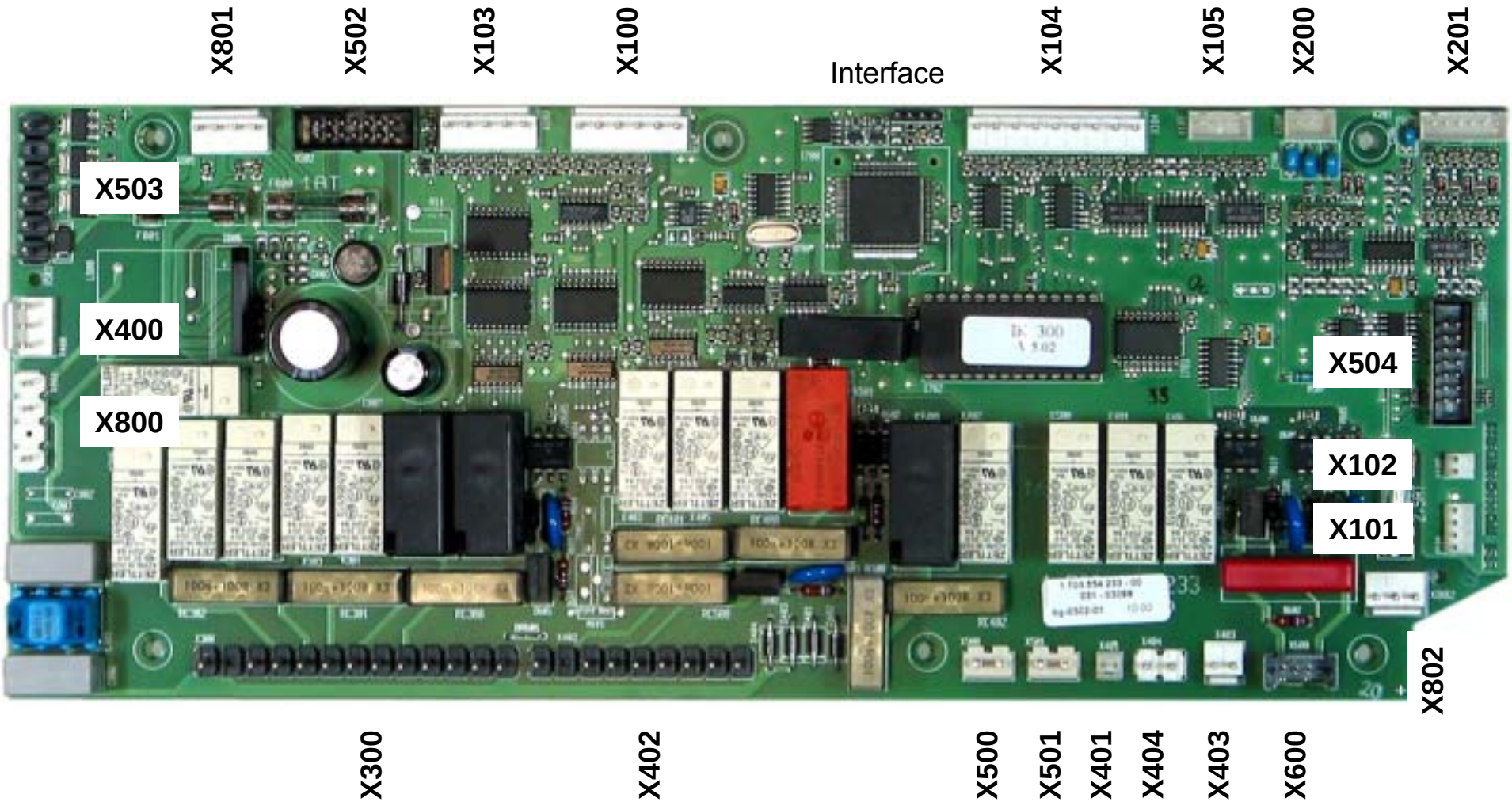


Starting from FD 8002 the shot-off valve is void

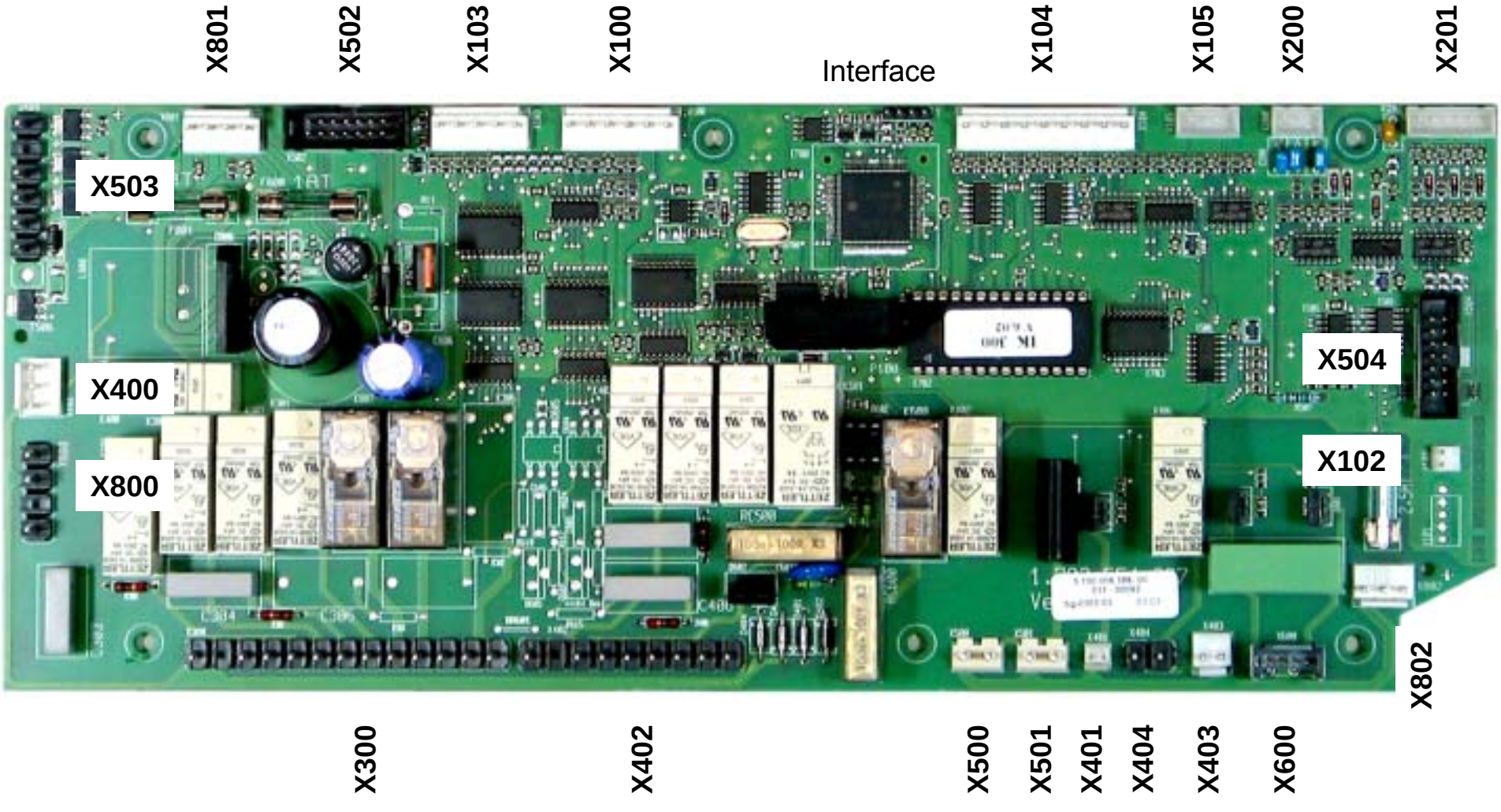
Electronics module



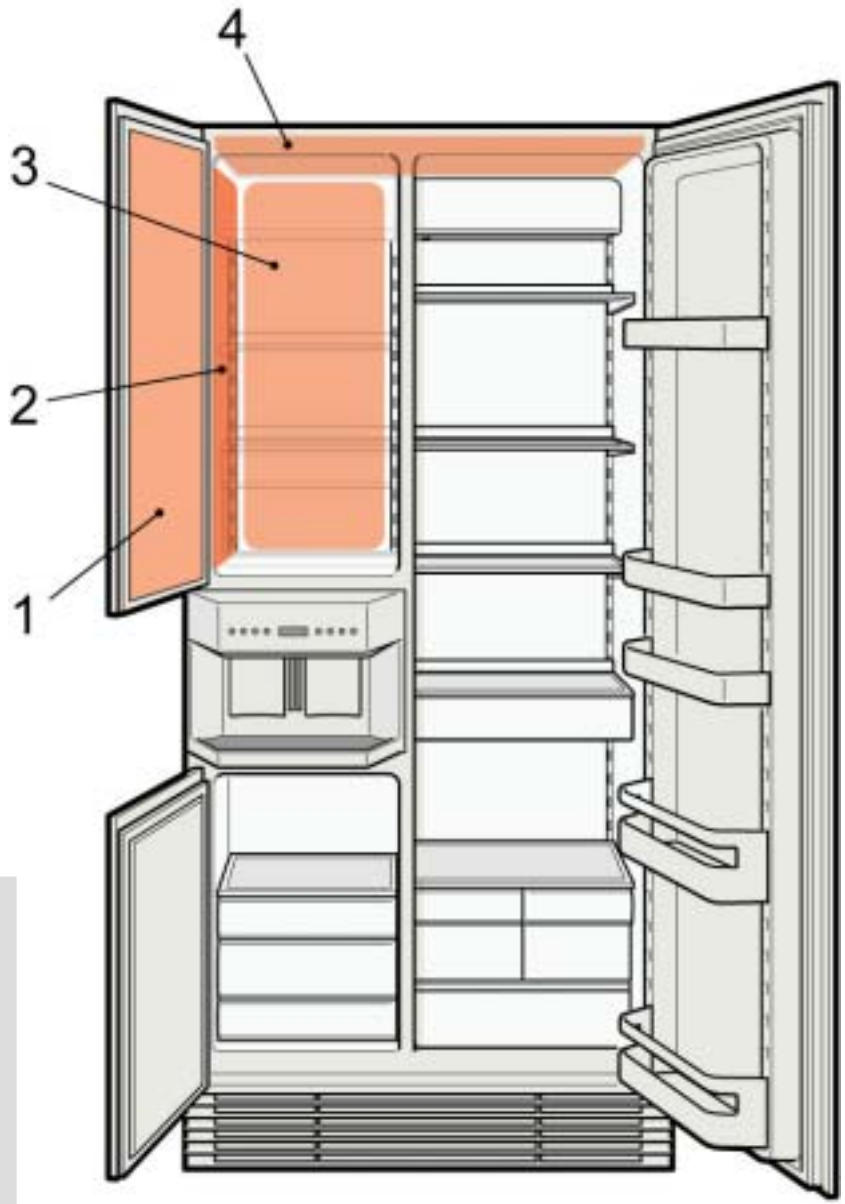
Electronics module up KI 21



Electronics module from KI 22



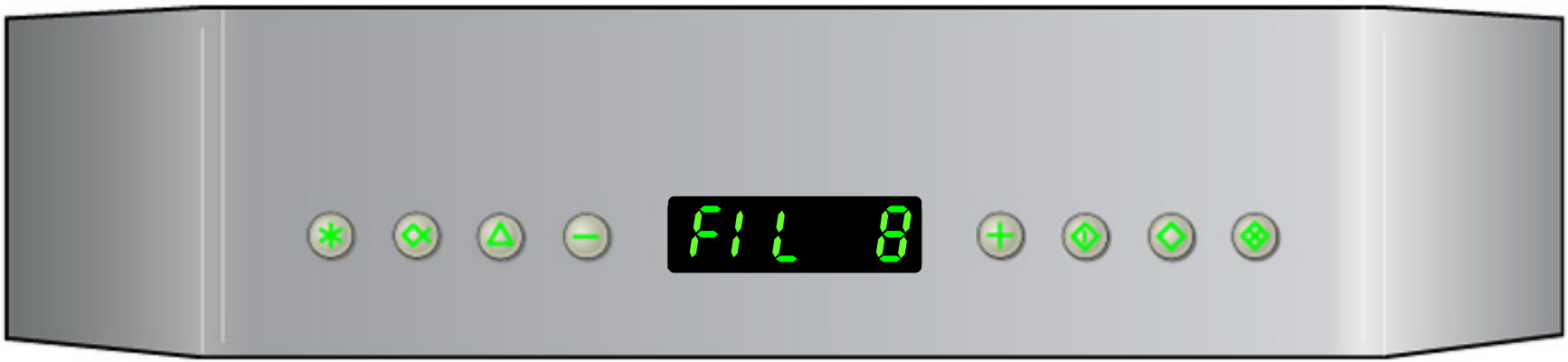
Vacuum panels



1. Freezer compartment door
2. Left side panel
3. Rear panel
4. Top of the appliance

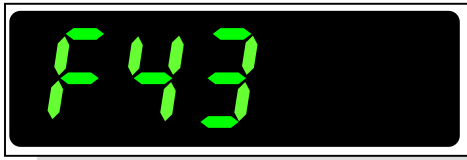
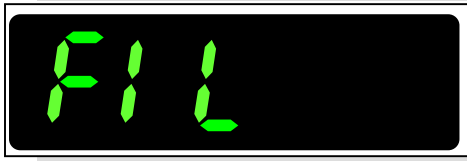
Only appliances **KI 21** up **FD 8003**

Fault codes



On the left side of the display alternating with the temperature indication error messages are spent

Faults are displayed in closed-loop control

	Required water height in the water trough not reached after a water inlet time of 3 min.
	Waste water alarm
	Temperature in the freezer compartment warmer than –16°C for longer than 1 week
	Dust filter in front of the condenser dirty

Fault memory

The fault codes are saved and can be displayed in the service programm

F 1 and F 2
Compartment sensor in the refrigerator compartment

Fault code F1 indicates an interrupted sensor and fault code F2 a short-circuited sensor.

The fault can be found on the sensor or on the supply cable to the electronics module.

If these faults occur, the compartment is operated in an emergency programme

F 3 and F 4
Evaporator sensor in the refrigerator compartment

Fault code F3 indicates an interrupted sensor and fault code F4 a short-circuited sensor.

The fault can be found on the sensor or on the supply cable to the electronics module.

If these faults occur, the compartment is operated in an emergency programme

F 5 - The set required temperature in the refrigerator compartment was not reached within 24 h

Possible causes

- A large amount of warm food was placed in the compartment.
- Condenser or dust filter on the base plate dirty.
- Appliance incorrectly installed
- Door seal leaking
- The refrigerator compartment fan is not running
- The condenser fan is not running or is running too slowly
- No refrigerant in the refrigerant circuit
- The compressor is not running

F 11 and F 12 - compartment sensor in the freezer compartment

Fault code F11 indicates an interrupted sensor and fault code F12 a short-circuited sensor.

The fault can be found on the sensor or on the supply cable to the electronics module.

If these faults occur, the compartment is operated in an emergency programme

F 13 and F 14
Evaporator sensor in the freezer compartment

Fault code F13 indicates an interrupted sensor and fault code F14 a short-circuited sensor.

The fault can be found on the sensor or on the supply cable to the electronics module.

If these faults occur, the compartment is operated in an emergency programme

F 15 - Defrosting phase was unsuccessful twice in succession

During the defrosting phase the temperature on the evaporator did not become warmer than –12 °C twice in succession.

Possible causes

- The defrosting heater is not actuated or is defective
- The safety thermal cut-out has actuated
- The evaporator sensor is defective

F 16 - evaporator temperature in the freezer compartment did not drop by 1 K within 5 min

This fault is only registered if the evaporator temperature is warmer than –6 °C and the fan does not run at all or longer than 5 min.

Possible causes

- Shut-off valve does not open
- The compressor is not running
- The evaporator sensor is defective
- No refrigerant in the refrigerant circuit

F 21 and F 22 - Compartment sensor in the “cool-fresh” compartment

Fault code F21 indicates an interrupted sensor and fault code F22 a short-circuited sensor.

The fault can be found on the sensor or on the supply cable to the electronics module.

If these faults occur, the compartment is operated in an emergency programme

F 23 - The set required temperature in the “cool-fresh” compartment has not been reached for 24 h

Possible causes

- The panel in the “cool-fresh” compartment is not situated on the base of the ice maker
- The air duct from the freezer compartment has frozen over
- The equalizing air duct from the “cool-fresh” compartment to the freezer compartment has frozen over
- The air flap is frozen to the air duct outlet
- The “cool-fresh” compartment fan is not running

F 24 - Temperature in the “cool-fresh” compartment colder than –2 °C for 15 min

Possible causes

- Air flap does not open
- Consumption values

F 31 and F 32 - Ice rod sensor

Fault code F31 indicates an interrupted sensor and fault code F32 a short-circuited sensor.

The fault can be found on the sensor or on the supply cable to the electronics module.

F 33 and F 34 - Compartment sensor in the ice maker

Fault code F33 indicates an interrupted sensor and fault code F34 a short-circuited sensor.

The fault can be found on the sensor or on the supply cable to the electronics module.

F 35 - Temperature in the ice maker colder than 0°C for 2 h

Possible causes

- Check ice-maker cover for leaks
- The heater is not actuated or is defective
- Check sensor
- Check air duct

F 37 - Limit switch at bottom is switched on while the water bowl is being swung up

This fault occurs only in appliances up to Eprom version 5.02

Possible causes

- Check limit switches for the water bowl

F 39 - Limit switch at top is switched on while the water bowl is being swung down

This fault occurs only in appliances up to Eprom version 5.02

Possible causes

- Check limit switches for the water bowl

F 40 - In the descaling programme the temperature on the ice rod has not risen above 5 °C for 5 min

This fault occurs only in appliances from **KI 22** and Eprom version **6.01**

Possible causes

- The heater is not actuated or is defective
- Safety thermal cut-out has actuated
- Check sensor
- The refrigerant solenoid valve does not switch over

In addition to this error message, fault code **F46** is also output

F 41 - Temperature on the ice rod is rising above 1 °C during the ice making process

This error message indicates a problem in the refrigeration circuit.

Possible causes

- Check sensor
- Shut-off valve does not open
- The compressor is not running
- No refrigerant in the refrigerant circuit

Fault codes **F16** or **F31** may also be displayed.

F 43 - Required water height in the water bowl not reached after a water inlet time of 3 min

Possible causes

- No water supply
- Water valve does not open
- Supply hose in the water bowl has frozen over
- Water electrodes are not being detected

F 44 - Temperature on the ice rod remains above 0 °C for 1 h during the ice making process

Possible causes

- Check sensor
- Shut-off valve does not open
- The refrigerant solenoid valve does not switch over
- No refrigerant in the refrigerant circuit

F 45 - Duration of ice production over 3 h

Possible causes

- Ice electrodes are not being detected
- Electronics module defective

F 46 - Temperature on the ice rod does not rise above 5°C after 1 h during the defrosting process

Possible causes

- The heater is not actuated or is defective
- Safety thermal cut-out has actuated
- Check sensor
- The refrigerant solenoid valve does not switch over

F 47 - Temperature on the ice rod is warmer than 49 °C

Possible causes

- The heater is actuated continuously
- Check sensor

F 50 - Waste water alarm

The fault is only output if water was detected for longer than 10 min by the safety electrodes on the ice-maker base or the waste water pump.

Possible causes

- Water outlet in the ice maker frozen over
- Waste water pump is not running
- Appliance incorrectly installed
- Electrodes are not being detected

F 51 - The value of the reference measurement for the finger protection was too high

The measured value during the reference measurement of the finger protection electronics module was too high, even though no LED was lit.

Possible causes

- Too much external light
- An LED is on

F 52 - The value of the reference measurement of the finger protection was too low

The measured value during the reference measurement of the finger protection electronics module was higher with actuated LED than the value without LED.

Possible causes

- Plug X504 on the electronics module has not been plugged in properly
- Ice dispenser slot dirty
- Finger protection electronics module defective

F 53 - The measured value of the finger protection electronics module without LED was too high during operation

The fault can only occur when the ice dispenser button is actuated.

The measured value on the photodiode was too high, even though no LED was actuated.

Possible causes

- Too much external light
- An LED is on

F 54 - Comparison measurement of the photodiodes during the reference measurement of the finger protection

The measured values of all photodiodes are compared with each other.
If there are differences, this error message is output.

Possible causes

- Ice dispenser slot dirty
- Water droplets on the photodiode
- Too much external light
- LED fitted at an angle to the circuit board
- Finger protection electronics module defective

F 55 - The measured values from the comparison measurement of the photodiodes are outside the tolerance

Possible causes

- Electronics module defective

F 60 - The low electrode in the waste water container is continuously detecting water

Due to the low electrode in the waste water container, the electronics module is continuously detecting water

Possible causes

- Waste water pump is not running
- Safety electrodes in the ice-maker base are in the water

F 61 - The low electrode in the waste water container is detecting no water

Due to the low electrode in the waste water container, the electronics module is detecting no water

Possible causes

- Waste water pump is not running
- Safety electrodes in the ice-maker base are in the water

F 62 - The high electrode in the waste water container is continuously detecting water

Due to the high electrode in the waste water container, the electronics module is continuously detecting water

Possible causes

- Safety electrodes in the ice-maker base are in the water

F 63 - The high electrode in the waste water container is detecting no water

Due to the high electrode in the waste water container, the electronics module is detecting no water

Possible causes

- Safety electrodes in the ice-maker base are in the water

F 64 - Electrodes on the water bowl are not being detected

The water bowl was swung down min. 3 times without water being detected by the electrodes

Possible causes

- Electrodes are not being detected

This fault occurs only in appliances up to **KI 22** and Eprom version **5.02**.

F 69 - Evaporator temperature in the freezer compartment did not drop by 1K 4 times within 5 min

The electronics module detects that fault **F 16** has already been output 4 times and outputs fault code **F 69**.

Possible causes

- The refrigerant solenoid valve does not switch over
- Shut-off valve does not open
- No refrigerant in the refrigerant circuit
- The compressor is not running

This fault is displayed as **F 75** in closed-loop control.

F 72 - Clean the dust filter

This error message requires the customer to clean the dust filter in front of the condenser.

F 72 is not displayed but **FIL**.

F 75 - Temperature in the freezer compartment warmer than -16 °C for longer than 1 week

This fault is stored as **F 69** in the fault memory of the service programme.

Possible causes

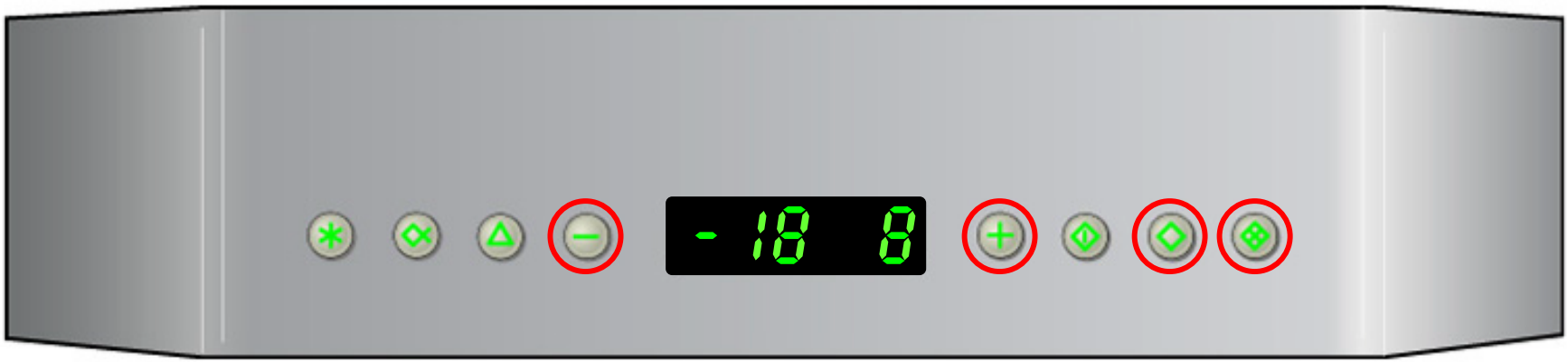
- Ambient temperature is warmer than 43 °C
- Condenser or dust filter on the base plate dirty.
- Appliance incorrectly installed
- The condenser fan is not running
- The freezer compartment sensor is defective
- The freezer compartment fan is not running

Serviceprogramme

Simultaneously press buttons

To terminate press button

Navigation in the serviceprogramme



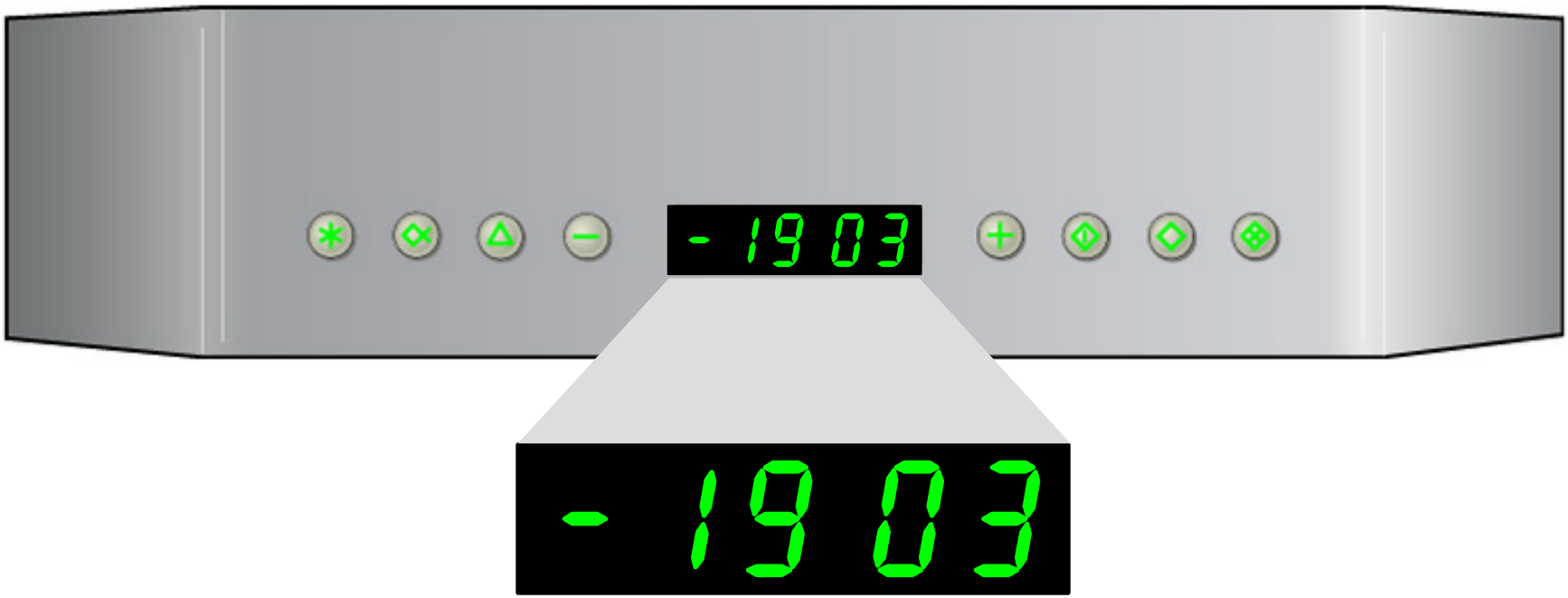
Next position

Previous position

Raise value

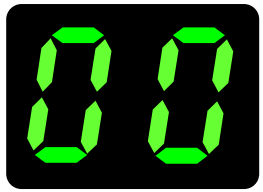
Reduce value

Display in the serviceprogramme



Value	Position

Position

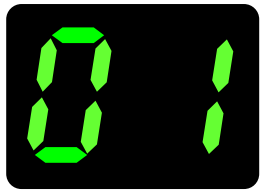
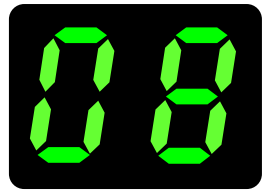


Defrosting the freezer compartment

A defrosting phase can be started by entering a 1

Value

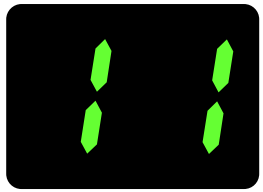
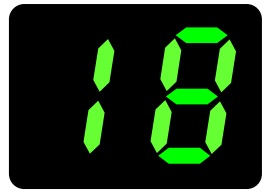
- **00** Defrosting is not running
- **01** Defrosting is required but is currently not possible as the ice maker is running
- **02** Defrosting is running

Position  till 

The current temperature value of the sensors are displayed in °C

Display

- **01** Compartment sensor, refrigerator compartment
- **02** Evaporator sensor, refrigerator compartment
- **03** Compartment sensor, freezer compartment
- **04** Evaporator sensor, freezer compartment
- **05** Compartment sensor, ice maker
- **07** Evaporator sensor, ice rod
- **08** Compartment sensor, “cool-fresh” compartment

Position  till 

Correction values

Display

- **11** Compartment sensor, refrigerator compartment
- **12** Evaporator sensor, refrigerator compartment
- **13** Compartment sensor, freezer compartment
- **14** Evaporator sensor, freezer compartment
- **15** Compartment sensor, ice maker
- **17** Evaporator sensor, ice rod
- **18** Compartment sensor, “cool-fresh” compartment

Correction values of the temperature sensors

The correction values have been set at the factory.

It is not usually necessary to change these values.

Change of the correction values

Example:

The measured value is 2 °C colder than the displayed value. The correction value must be changed to –2.

Old value: **–2** New value: **–4**

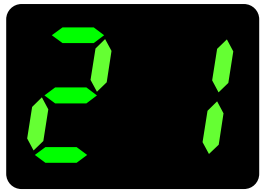
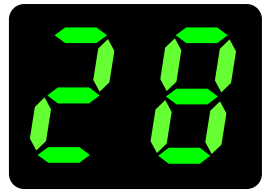
The value must be changed by **–2**. (–2 **–2** = –4)

Old value: **+2** New value: **0**

The value must be changed by **–2**. (+2 **–2** = 0)

Old value: **–2** New value: **+1**

The value must be changed by **+3**. (–2 **+3** = +1)

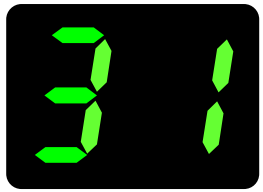
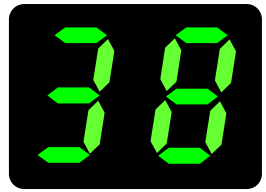
Position  till 

Monitoring of the temperature sensors on short-circuit

value **0** Sensor in measuring range - value **1** Fault detected

Anzeige

- **21** Refrigerator compartment sensor short-circuited
- **22** Refrigerator compartment evaporator sensor short-circuited
- **23** Freezer compartment sensor short-circuited
- **24** Freezer compartment evaporator sensor short-circuited
- **25** Ice maker compartment sensor short-circuited
- **27** Ice rod evaporator sensor short-circuited
- **28** “Cool-fresh” compartment sensor short-circuited

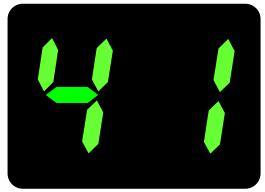
Position  till 

Monitoring of the temperature sensors on interruption

value **0** Sensor in measuring range - value **1** Fault detected

Display

- **31** Refrigerator compartment sensor interrupted
- **32** Refrigerator compartment evaporator sensor interrupted
- **33** Freezer compartment sensor interrupted
- **34** Freezer compartment evaporator sensor interrupted
- **35** Ice maker compartment sensor interrupted
- **37** Ice rod evaporator sensor interrupted
- **38** “Cool-fresh” compartment sensor interrupted

Position  till 

Ice maker inputs and outputs of the electronics module

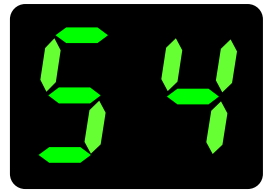
Value **0** Input not detected or output not actuated1

Value **1** Input detected or output actuated

Position 41 till 49

Position

- **41** Water detected on the water electrode
- **42** No water, ice or air detected on the ice electrode
- **43** Upper water trough limit switch has been actuated
- **44** Lower water trough limit switch has been actuated
- **45** Ice dispenser limit switch actuated
- **46** Refrigerant solenoid valve is positioned towards the ice maker evaporator
- **47** Drinking water dispenser button pressed
- **48** Ice dispenser button pressed
- **49** Waste water alarmis emitted by the safety electrode of the waste water pump or by the electrodes in the base of the ice maker

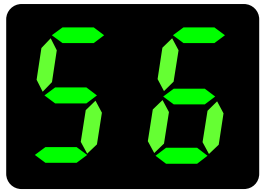
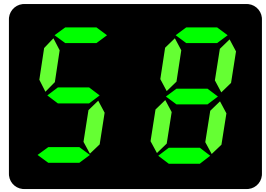
Position  till 

Defrost in the freezer compartment

Hours and minutes are displayed alternately

Display

- **50** Time until next defrosting phase depending on the door opening frequency
- **51** Time between two defrosting phases depending on the door opening frequency
- **52** Time until next defrosting phase depending on the fan running time
- **53** Time between two defrosting phases depending on the fan running time
- **54** Time until the next defrosting phase – Only within the first 10 to 15 days following start-up

Position  till 

Doorswitch

Value **0** Contact open Value **1** Contact closed

Display

- **56** Reed switch, freezer compartment
- **57** Reed switch, “cool-fresh” compartment
- **58** Reed switch, refrigerator compartment

Position 60 till 64

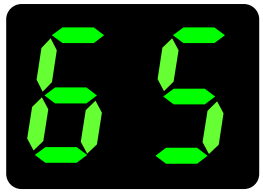
Time - controlled ice making

With entering a **1** in Pos. **60** and **62** the Ibiza circuit is activated

Display

- **60** Time-controlled filling of the water trough, this function is switched on by entering a 1
- **61** Filling time of the water trough – factory setting 50 s
- **62** Time-controlled ice maker – this function is switched on by entering a 1
- **63** Time required to make ice – factory setting 40 min.
- **64** Minimum resistance value for ice detection –
  the value is between 10 Ω and 80 Ω

Position



Statuses of the ice maker

Program sequence of the ice preparing can be examined

Sequence of ice maker

Display

- **01** Wait until the temperature in the ice maker is warmer than 0 °C
- **02** Swing down the water bowl
- **03** Ice rods are being heated
- **04** Up version 5.01 – Swing up water bowl

  From version 5.02 – Wait until defrosting ends and freezer compartment temperature is cold enough
- **05** From Eprom version 5.01 – Swing up water bowl
- **10** Fill with water until the water level is detected by the electrodes
- **11** The water valve remains actuated for 30 % of the previously required filling time
- **12** Water filling is time-controlled – only if a 1 was entered in Pos. 60
- **20** Ice maker
- **21** Ice detection, ice is touching the ice electrode
- **22** The increase in the resistance value is monitored until the electrode is completely covered in ice
- **23** Ice maker is time-controlled – only if a 1 was entered in Pos. 62

Position 66 till 69

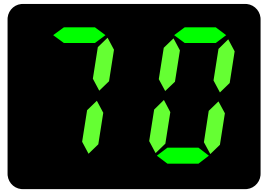
Values on the electrodes

≈ 850Ω Air	100 -700Ω Water

Display

- **66** Value which is measured on the ice electrode
- **67** Value which is measured on the water electrode
- **68** Resistance difference between the values from Pos. 66 and 67
- **69** Resistance value of ice detection

Position

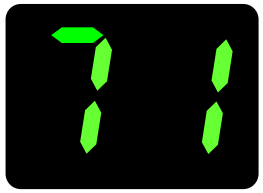


Limit temperature foe ice rod heater

During the ice production if this temperature at the ice pin is fallen below, then against heating temperature becomes with the ice pin heating

Range of adjustment: -30 to -0

Value **–15 or -10**

Position  and 

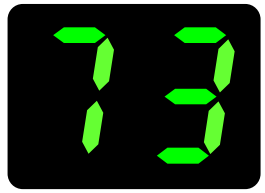
Interval until **FIL** is displayed

Basic setting 8 weeks

Display

- **71** Setting range 1 to 99 weeks
- **72** Remaining time until display is activated

Position



Measured value of the photodiode for finger protection

Not relevant to customer service

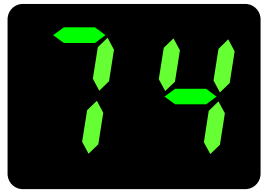
Also from Eprom version 5.02

- **Fault E40 –** Waste water pump actuated 3 times for no reason
- **Fault E41 –** Waste water pump actuated 4 times for no reason

From Eprom Version 6.02

- **Fault E40 = E60**
- **Fault E41 = E61**

Position



Value of the waste water electrodes

The setpoint value and the actual value are displayed alternately

< 210 corresponds to air > 210 corresponds to water

Display

- **E0** Low electrode
- **E1** High electrode
- **E2** Safety electrodes

From Eprom version 6.02

- **E2** Electrode safety electrode in the waste water container
- **E3** Electrode safety electrode on the base of the ice maker

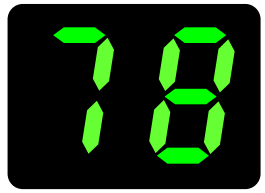
Positionen  and 

Control compressor freezer compartment

Display

- **75** **E0** Relative ON duration of the compressor as a %
  E1 Limiting value of the relative ON duration from which the shut-off valve remains open
- **76** Time in h that the air temperature in the freezer compartment was above –16 °C

Position



Reference measurement of the finger protection electronics

A reference measurement can be started by registering a **1**

Anzeige

- **0** No measurement active
- **1** Reference measurement is running
- **2** Reference measurement was not successful, defective finger protection or electronics module

Position

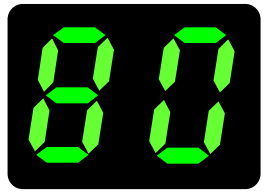
Shut-off valve

By registering a **1** the valve remains always opened

Display

- **0** Is actuated depending on the relative ON duration of the compressor
- **1** Valve remains permanently open

Position



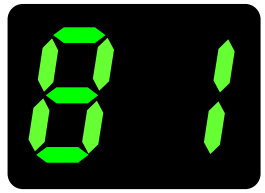
Demonstration circuit

By registering a **1** the demonstration circuit switched on

Display

- **0** Demonstration circuit switched off
- **1** Demonstration circuit switched on

Position



Fault memory

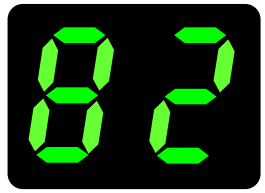
The fault and the frequency of the fault are indicated alternately on the left side of the display

If no fault has been saved, F 0 and 0 are displayed alternately

Memory forwards

Memory backwards

Position

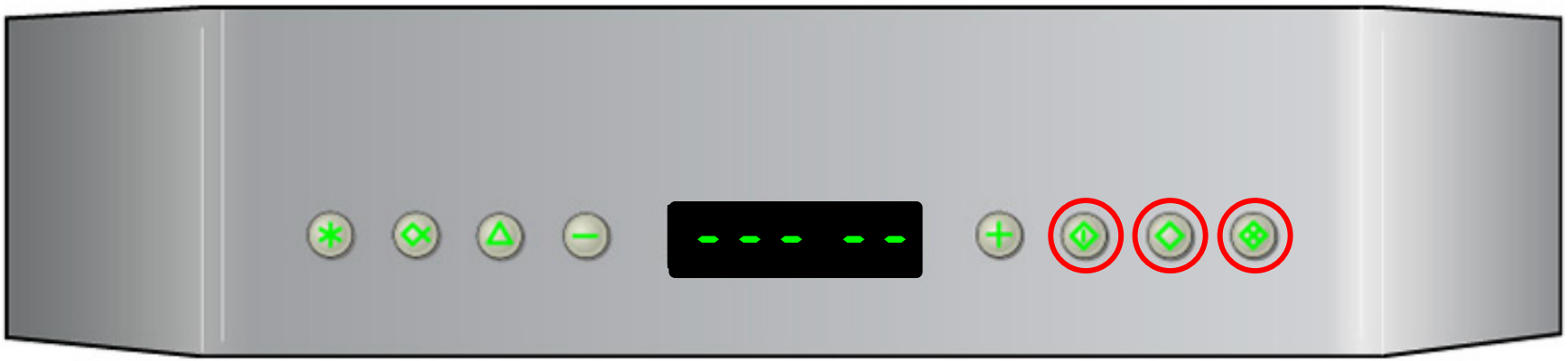


Delete all entries in the fault memory

By registering a **1** and go to the next position

The fault memoray is deleted

Component test programme



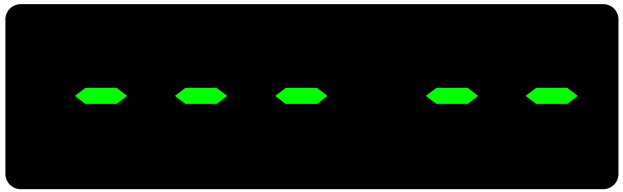
Within the first 7 s after switching on the appliance

simultaneously press buttons

The component test programme is ended switching off the appliance

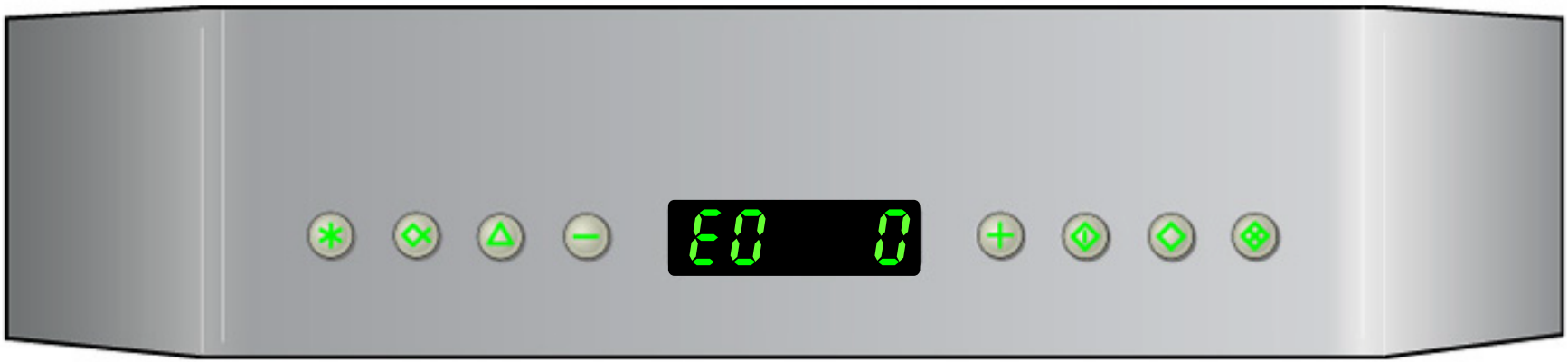
Selecting the programme

The display changes from



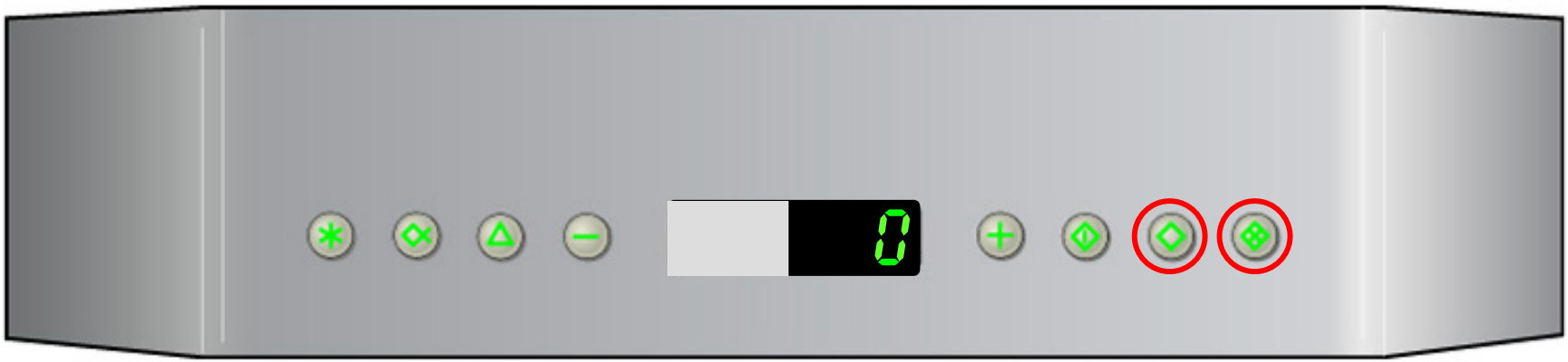
to

Display



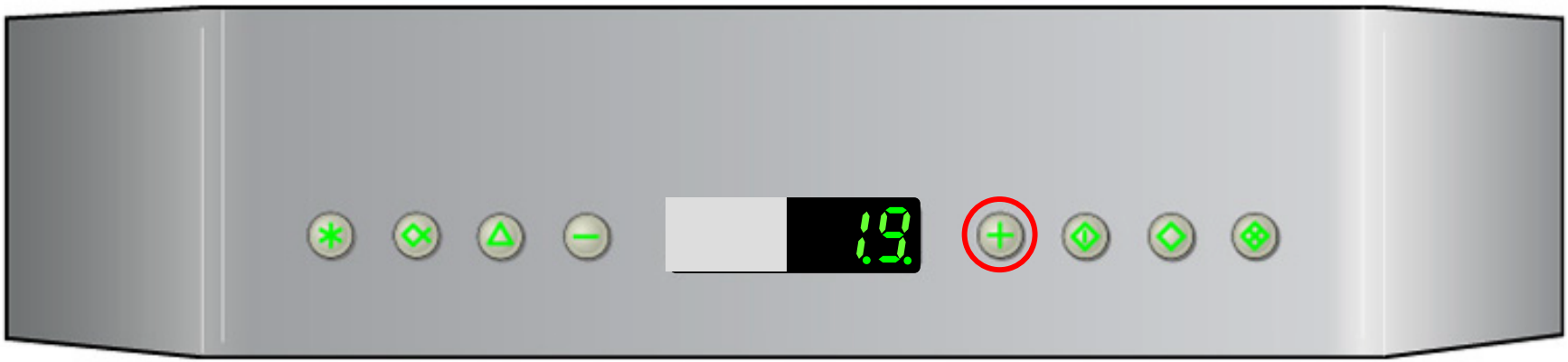
Input	Output

Outputs of the electronics module



Next output	Previous output

Switch the output on



Switch the output on or off

Decimal points in the display shine

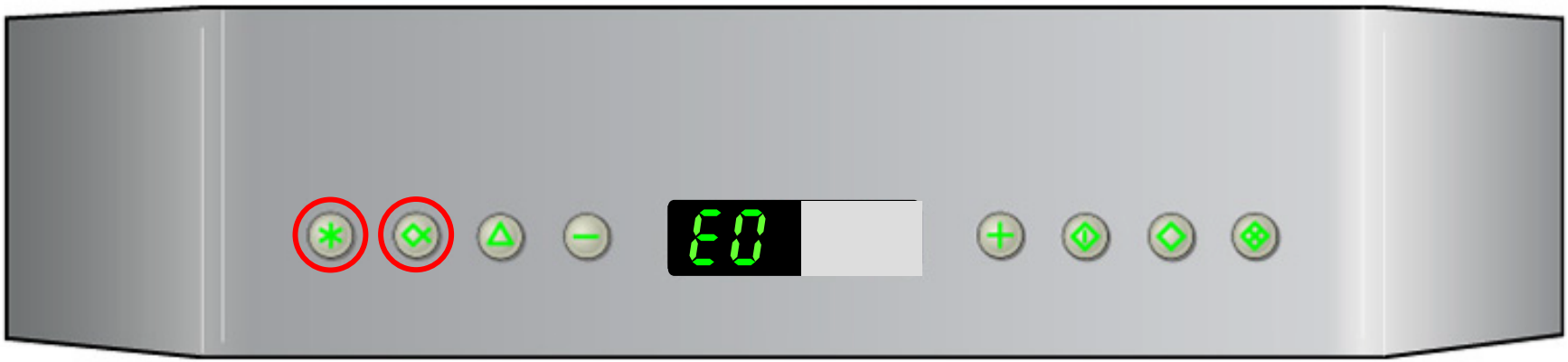
Output

Output	Function
0	“Cool-fresh” compartment lightFrom Eprom version 5.02“Cool-fresh” compartment and refrigerator compartment light
1	“Cool-fresh” compartment fan
2	Lifting magnet for the air flap in the “cool-fresh” compartment
3	Up to Eprom version 6.01 refrigerator compartment light
4	Refrigerator compartment fan
5	Refrigerator compartment compressor
6	Condenser fan
7	Freezer compartment and ice maker compressor
8	Shut-off valve
9	Freezer compartment fan
10	Freezer compartment heater
11	Freezer compartment light
12	Transformer for ice maker
13	Ice maker heater

Output

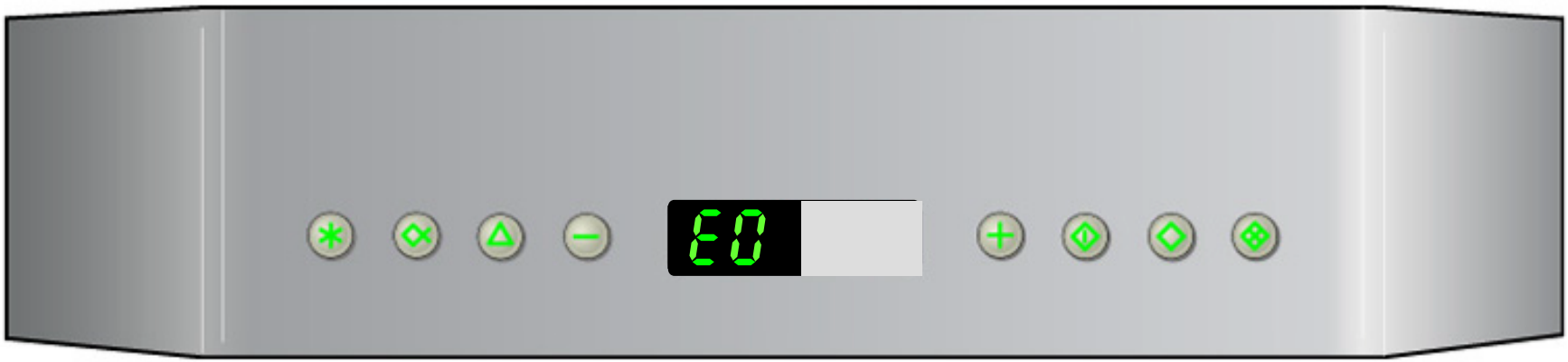
Output	Function
14	Ice rods heater
15	Water trough downwards swivel motor
16	Water trough upwards swivel motor
17	Water inlet valve for ice maker
18	Lifting motor for the water trough
19	Refrigerant solenoid valve Ice maker evaporator is actuated 
20	Lifting magnet for crushed ice is actuated Warning! Finger protection is off
21	Drive motor for dispenser spindle Warning! Finger protection is off
22	Water inlet valve for drinking water
23	Waste water pump

Intputs of the electronics module



Next input	Previous input

Display of the value



Alternately the position and the value of the selected input is shown

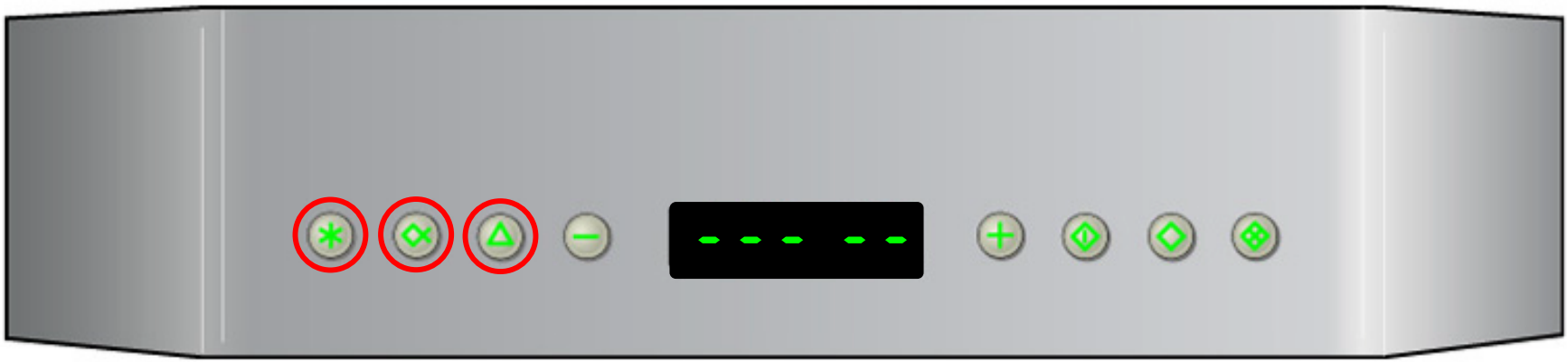
Inputs

Input	Function	Value
E 0	Compartment sensor, refrigerator compartment	°C
E 1	Evaporator sensor, refrigerator compartment	°C
E 2	Compartment sensor, freezer compartment	°C
E 3	Evaporator sensor, freezer compartment	°C
E 4	Compartment sensor, ice maker	°C
E 5	Compartment temperature	°C
E 6	Evaporator sensor, ice rod	°C
E 7	Compartment sensor, “cool-fresh” compartment	°C
E 8	Switch, drinking water dispenser	0=off, 1=on
E 9	Switch, ice dispenser	0=off, 1=on
E 10	Switch, lower water bowl	0=off, 1=on
E 11	Switch, upper water bowl	0=off, 1=on
E 12	Switch, ice dispenser full	0=off, 1=on
E 13	Door switch, freezer compartment	0=off, 1=on

Inputs

Input	Function	Value
E 14	Door switch, refrigerator compartment	0=off, 1=on
E 15	Door switch, “cool-fresh” compartment	0=off, 1=on
E 16	Ice electrode	Ω
E 17	Water electrode, ice cube tray	Ω
E 18	Waste water electrode high	Ω
E 19	Waste water electrode low	Ω
E 20	**Up to Eprom version 5.02** Safety electrode in the waste water container or on the base of the ice maker **From Eprom version 6.01** Safety electrode in the waste water container	Ω
E 21	**From Eprom version 6.01** Safety electrode on the base of the ice maker	Ω

Self-diagnosis programme



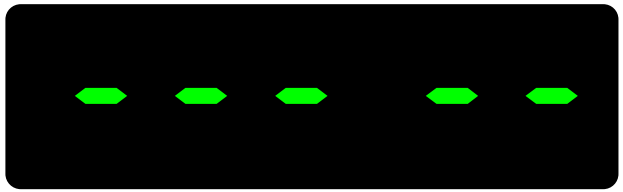
Within the first 7 s after switching on the appliance

Simultaneously press buttons

The component test programme is ended switching off the appliance

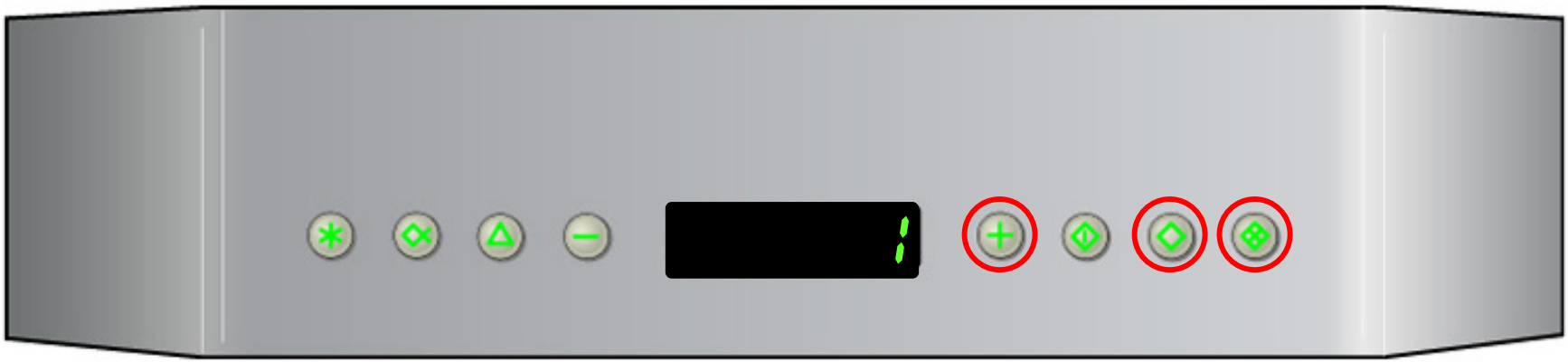
Selecting the self-diagnosis programme

Display changes from



to

Navigation in the self-diagnosis programme



Program forward

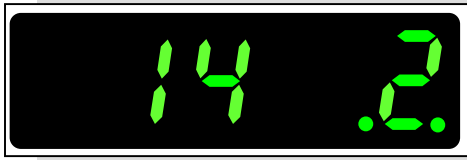
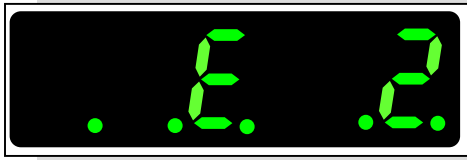
Program backward

Program start

Self-diagnosis programme

	Total diagnosis
	Waste water diagnosis programme
	Ice maker diagnosis programme
	Refrigerator compartment diagnosis programme
	Freezer compartment diagnosis programme
	Noises diagnosis programme

Display in the self-diagnosis programme

	Diagnosis programme aktiv
	Diagnosis programme 1 has been selected
	Number of the test step is displayed
	Fault is detected in the test step
	Diagnosis programme ends without a fault

Total diagnosis programme

The total diagnosis programme consists of programmes 2 to 5.

Waste water diagnosis programme

Check all electrodes

Function of the waste water system is examined

Ice maker diagnosis programme

3

- Check heater for the ice rods
- Check electrodes of the water bowl
- Check water circuit of the ice maker
- Check sensor
- Check refridgerant circuit

Refrigerator compartment diagnosis programme

Check door switch

Check sensor

Check refridgerant circuit

Freezer compartment diagnosis programme

Check door switch

Check sensor

Check refridgerant circuit

Noises diagnosis programme

All components are headed for 10s

Long-term diagnosis programme

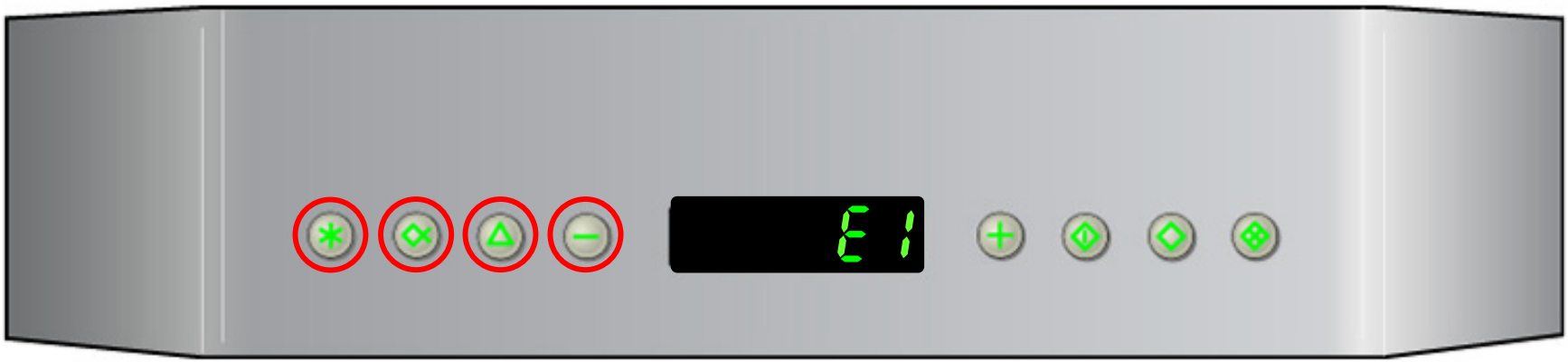
Appliances from **KI 22** and from **FD 8106**

Duration **12** hours

During normal closed-loop control

Assistance with the error tracing

Start long-term diagnosis programme



During normal closed-loop control

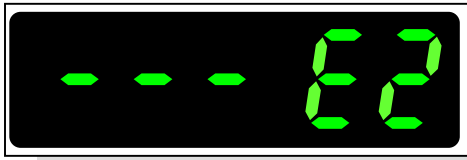
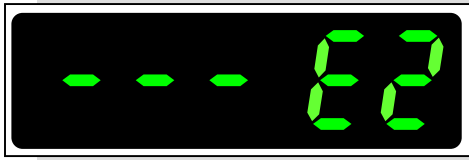
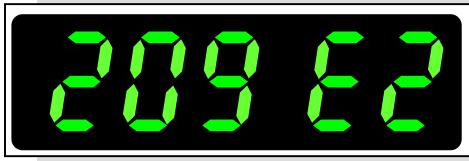
Simultaneously press buttons

The test programme is ended switching off the appliance

Long-term diagnosis programme

	Refrigerator compartment diagnosis programme
	Freezer compartment diagnosis programme
	“Cool-fresh” compartment diagnosis programme
	Ice maker diagnosis programme

Display in the long-term diagnosis programme

	Diagnosis programme aktiv
	Alternating the diagnostic step and the program number are indicated
	Diagnosis programme ends without a fault
	All recognized errors are indicated alternating on the left side

Non-tested inputs and outputs

Input	Output
➢ Reed contacts of the door switches	➢ Light
➢ Limit switch on the water bowl for the height of the ice	➢ Lifting magnet for crushed ice
➢ Safety electrode on the water bowl	➢ Spindle motor for the ice dispenser
	➢ Water valve for drinking water

Error displays in the long-term diagnosis programme

The indicated fault should be further tested with the aid of the component test programme.

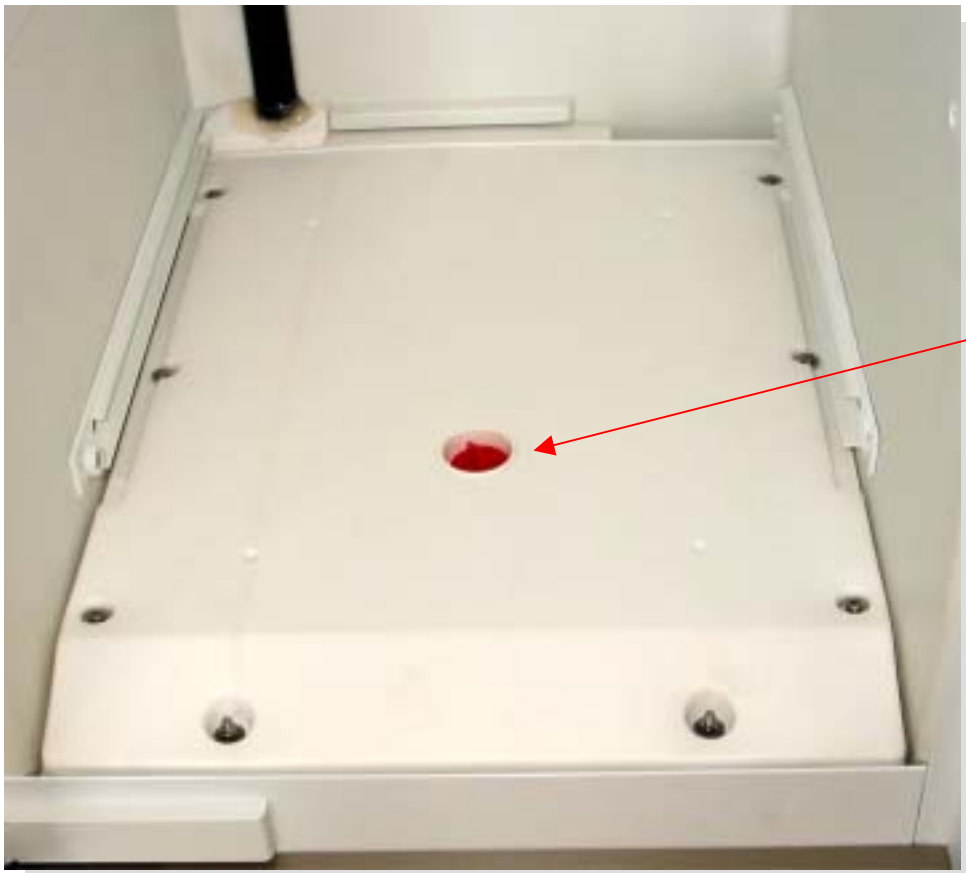
Descaling programme

Appliances from **KI 22** and Eprom version **6.01**

Duration 12 hours

Function of the appliance remains up to the ice preparing

Descaling programme



Descaler,

Material nr. **31 0451**

fill in here

Start the descaling programme

Hold down the  and  button for 5 s

Is displayed

The descaling programme cannot be ended or interrupted

Technical changes KI 21

Date	Changes
01.2000	Main control with **Eprom 5.00**
01.2000	Main control with **Eprom 5.01**
01.2000	Shut-off valve not applicable
02.2000	**Eprom 5.02** (from 18.01.2000)
03.2000	Vacuum panels not applicable
03.2000	New dust filter
03.2000	Finefilter in the waterinlet (Material nr. 18 1839)
04.2000	New heater in the ice maker compartment
05.2000	New Material for the water bowl
06.2000	New FKF fan with ball bearing
08.2000	New refrigerant valve with sintered filter (Aweco)
09.2000	New transformer for electronics module
10.2000	Ice screw made of stainless steel wire
11.2000	New interference suppressor filter

Technical changes KI 22

Date	Change
04.2001	New waste-water area with overflow tray and new waste-water pump **Eprom 6.00**
04.2001	**Eprom 6.01** (from 24.4.2001)

Technical changes KI 23

Date	Change
09.2001	Water bowl with connecting-rod drive and new cam

Technical changes KI 24

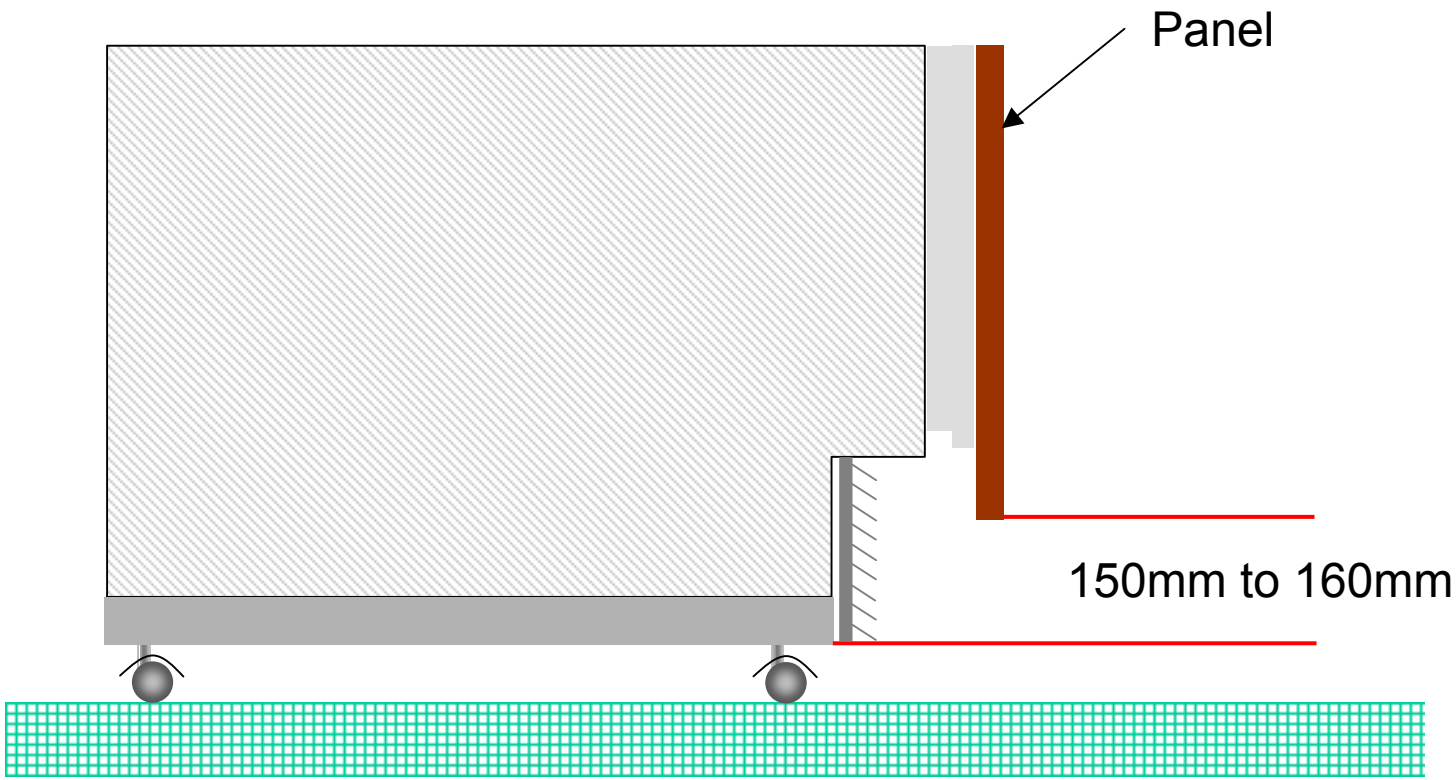
Date	Change
10.2001	Ice-maker evaporator with soldered-on ice rods
10.2001	New freezer compartment compressor, Zanussi GQT 80 RSE
04.2002	New condenser fan, max. speed 700 r.p.m.

Technical changes KI 25

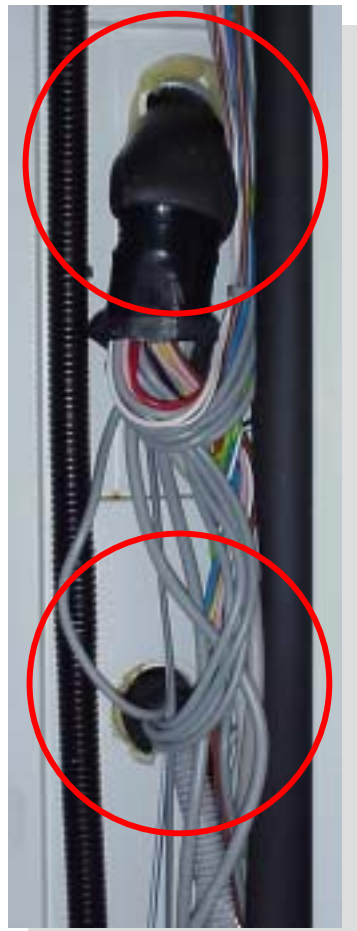
Date	Change
02.2003	Coated ice-maker evaporator **Eprom 6.02** (from 24.4.2003)

Fault diagnostics

Checking the installation location



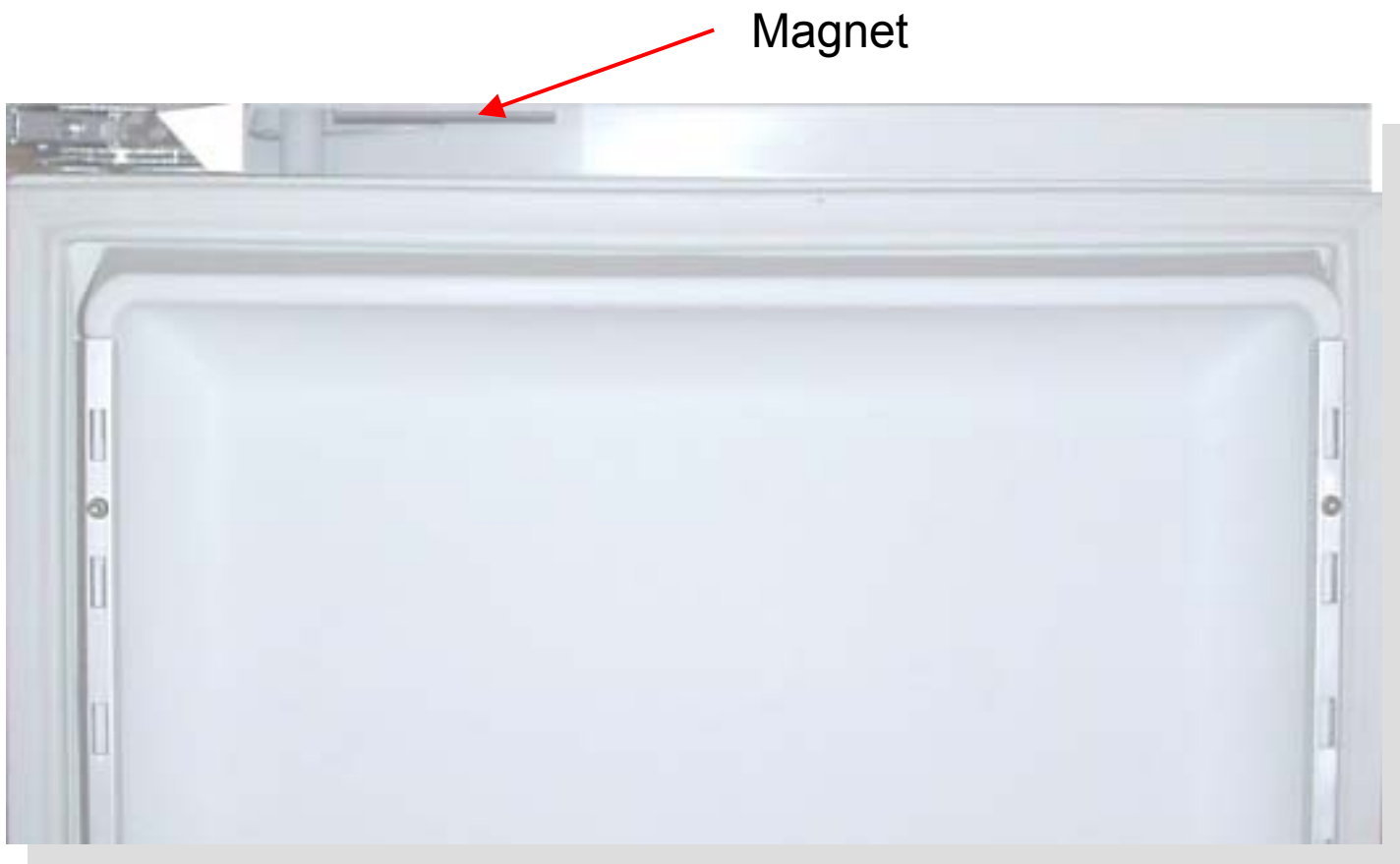
Checking the carcass of the appliance



Checking the condensation outlet

Checking the condenser fan

Checking the light



Checking the sensor

measure the resistance of the sensor

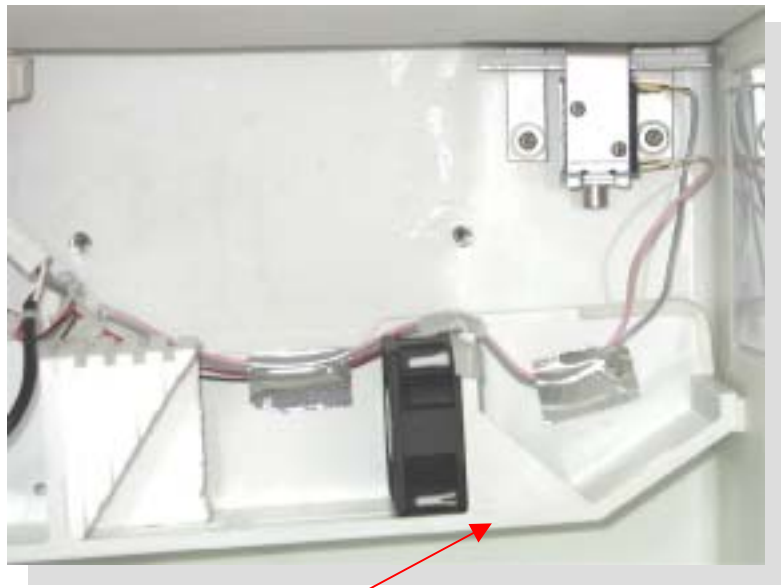
measure the resistance of the sensor at the electronocs

Check the fan

Switch on the fan with the aid of the component test programme

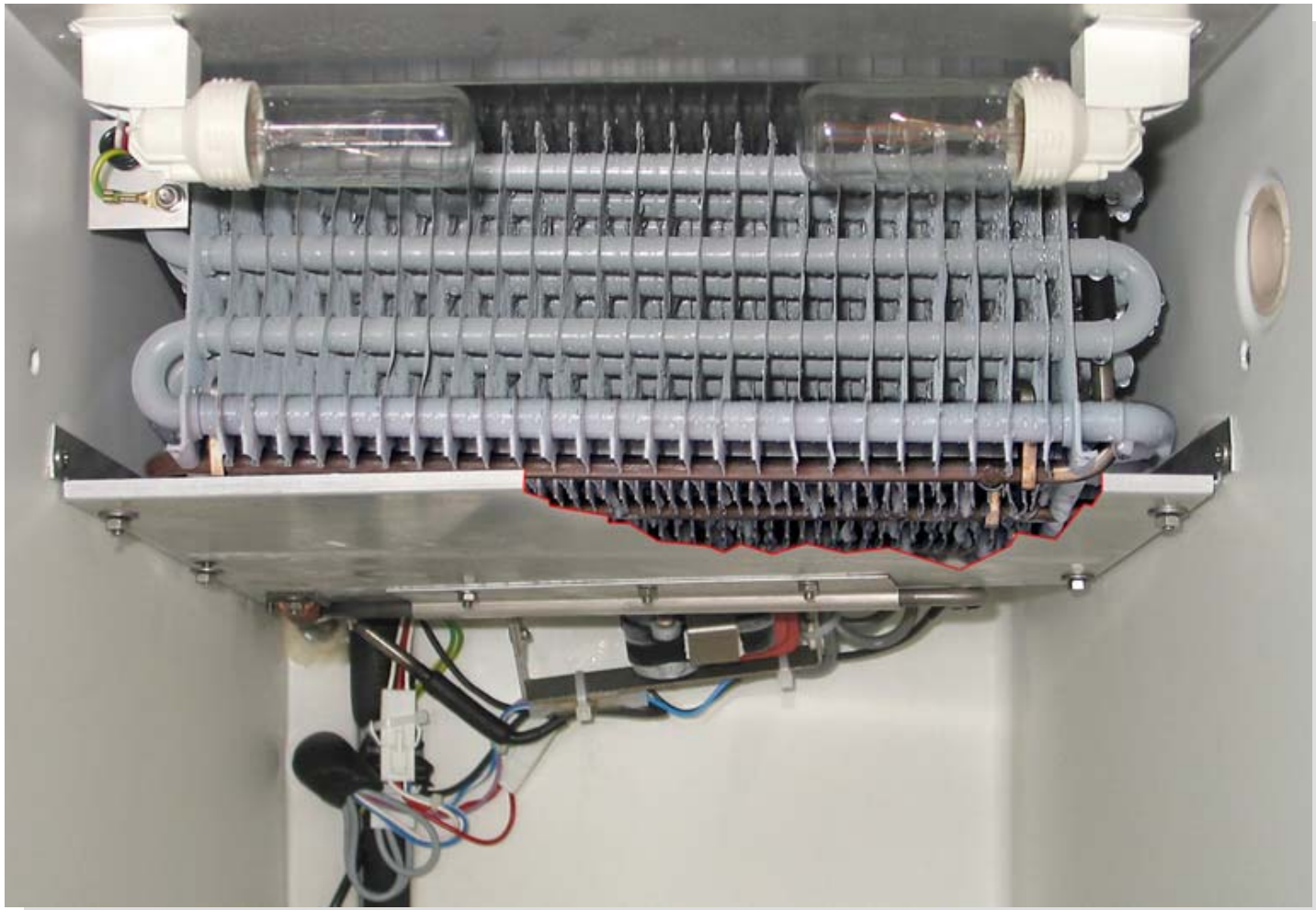
Check the funktion of the fan

Checking the fan in the “cool-fresh” compartment

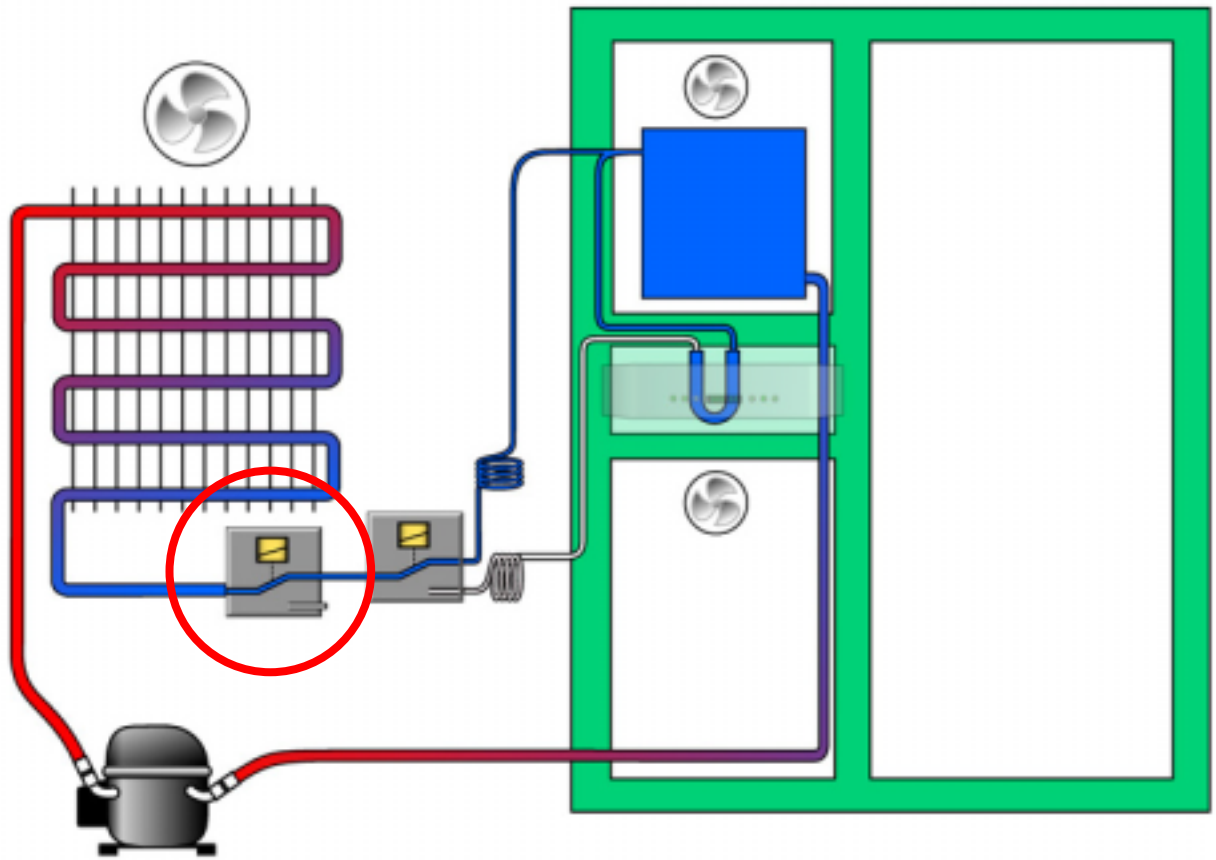


Foam strips

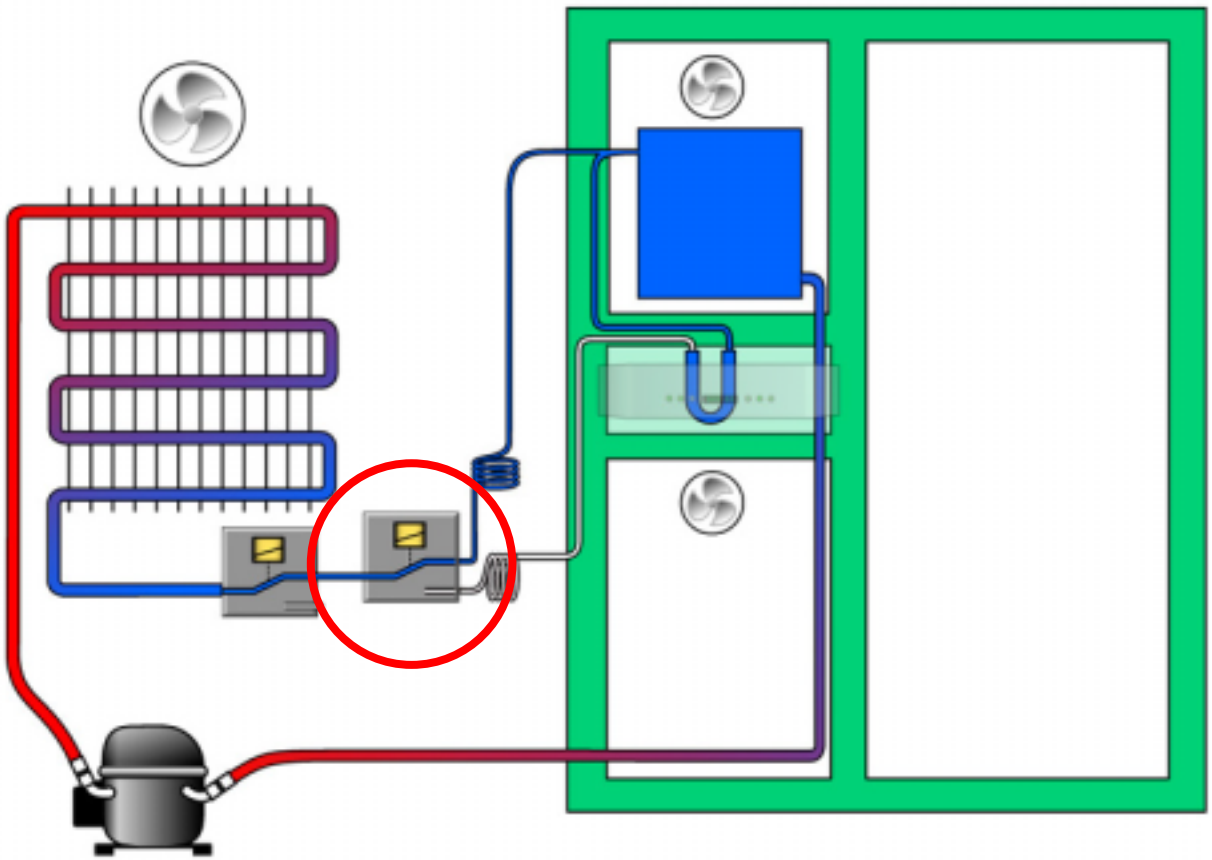
Checking the defrosting heater in the freezer compartment



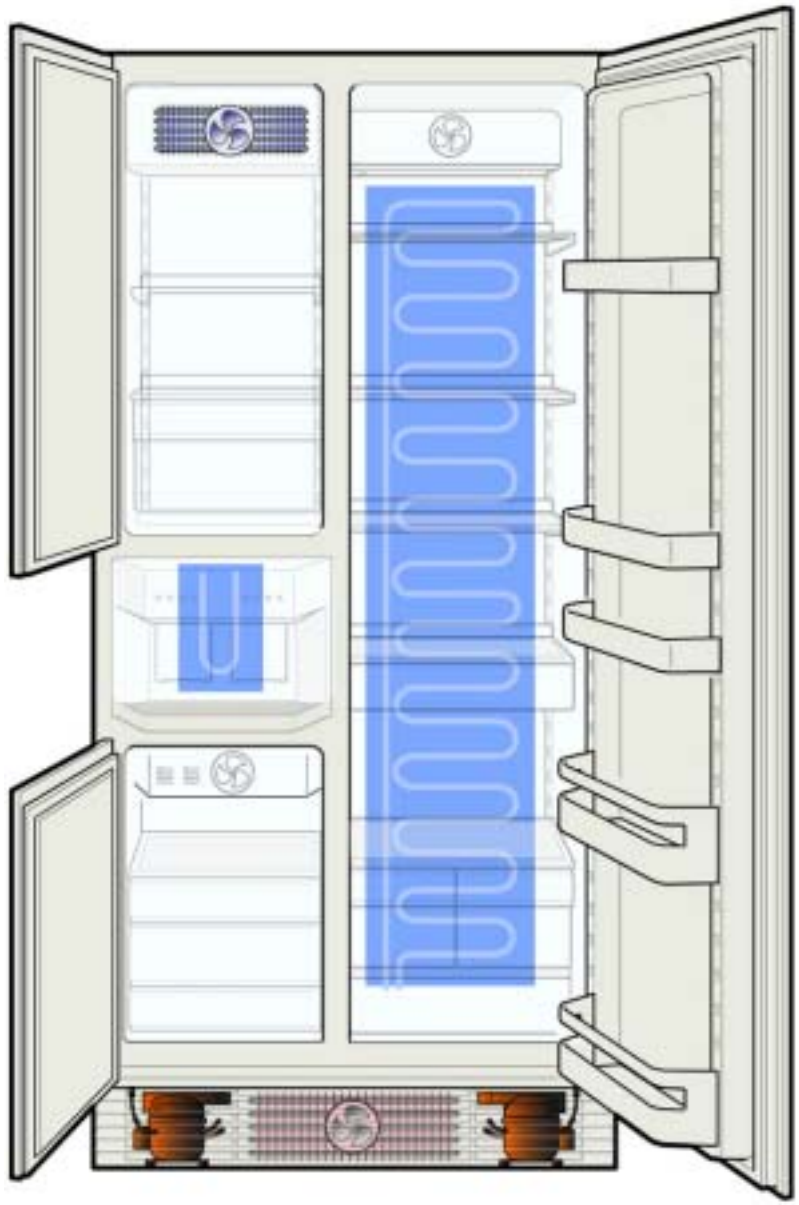
Checking the shut-off valve



Checking the refrigerant solenoid valve



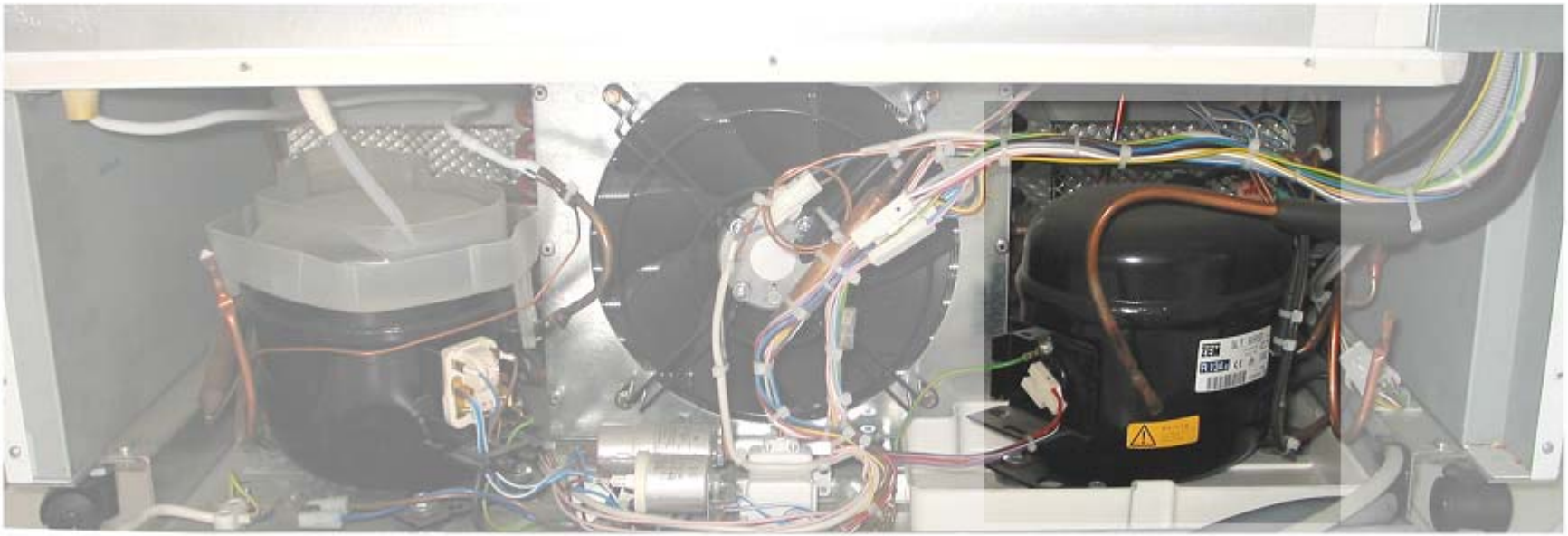
Refrigerant circuit leaking



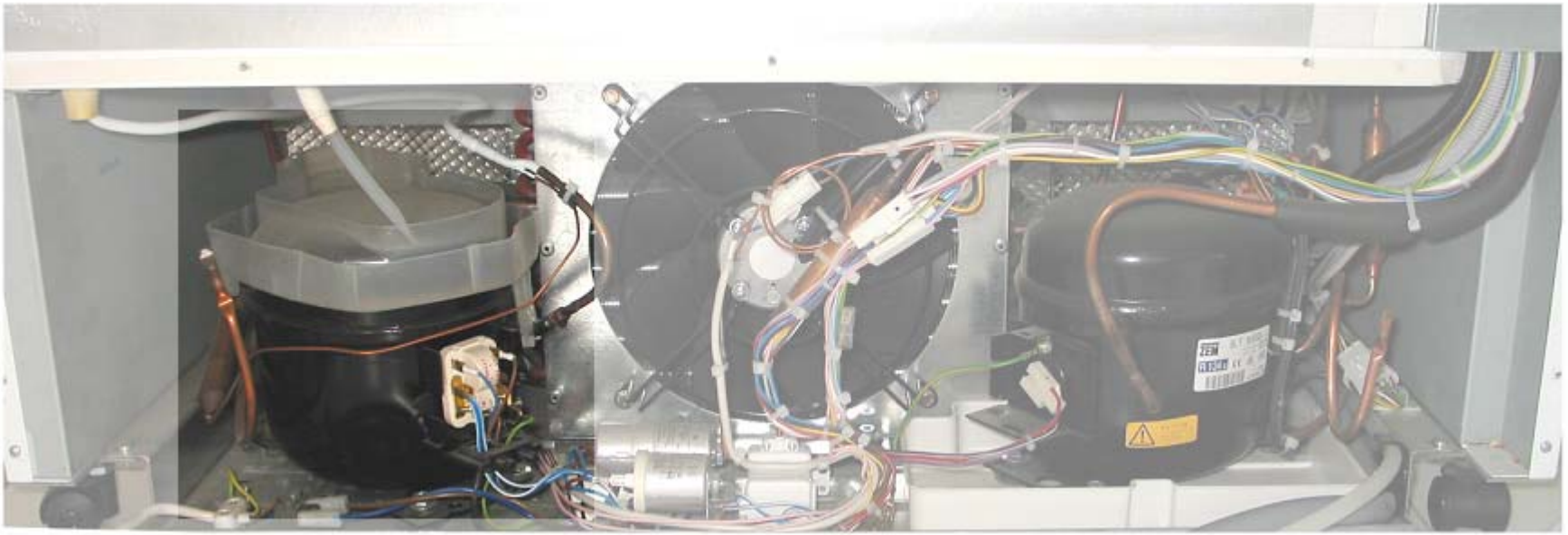
- Switch on the compressor
- Monitor the evaporator temperature

Checking the air flap in the “cool-fresh” compartment

Compressor for the freezer compartment does not run



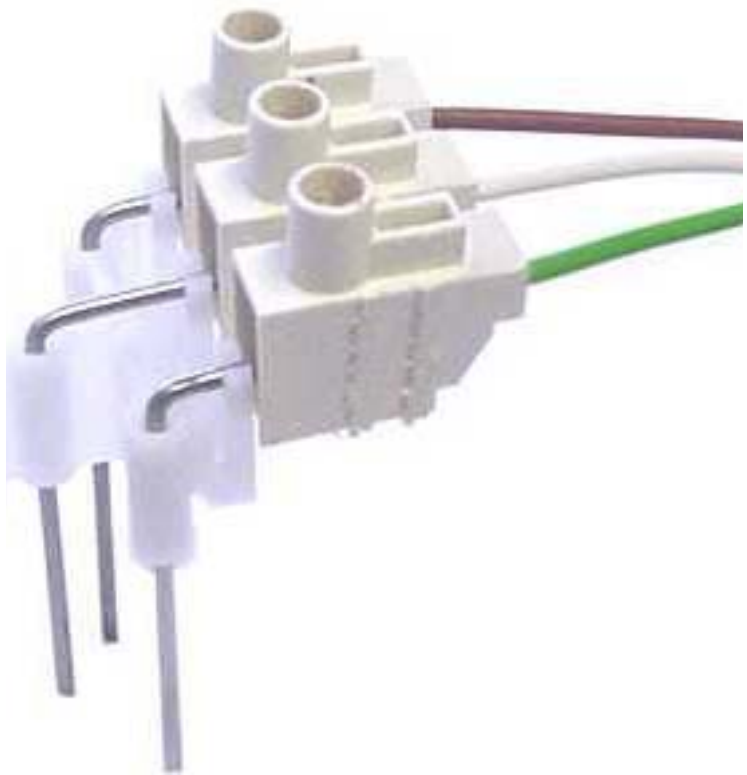
Compressor for the refrigerator compartment does not run



Checking the ice maker

Passivation coating on the electrodes

- The electrodes must be free of deposits



Accumulation of mud in the ice maker

Mud and alga formation under the ice-maker

Sanitation of the appliance

Sanitation

Garden pump