User Manual

DRY172/MEAT
DRYB172/MEAT

Version: ***E15112023eng***

INOMAK Refrigerators

Contents

1. Introduction

This manual provides comprehensive guidelines for the installation, operation, and maintenance of the appliance.

Please read and adhere to all safety instructions to ensure safe and efficient use of the appliance.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory, or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Children shall not play with the appliance
- Cleaning and user maintenance shall not be made by children without supervision

Do not store explosive substances such as aerosol cans with flammable propellant in this appliance.

- **WARNING**: Keep clear of obstruction all ventilation openings in the appliance enclosure or in the structure for building-in.

- **WARNING**: Place in well-ventilated area to prevent accumulation of refrigerant.

- **WARNING:** Do not use mechanical devices or other means to accelerate the defrosting process, other than those recommended by the manufacturer.

- **WARNING:** Do not damage the refrigerant circuit.

- **WARNING:** Do not use electrical appliances inside the food storage compartments of the appliance, unless they are of the type recommended by the manufacturer.

- **WARNING**: The power socket that your appliance will be connected must be provided with ground. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

- **WARNING:** Repair and disposal must be carried out by trained service personnel.

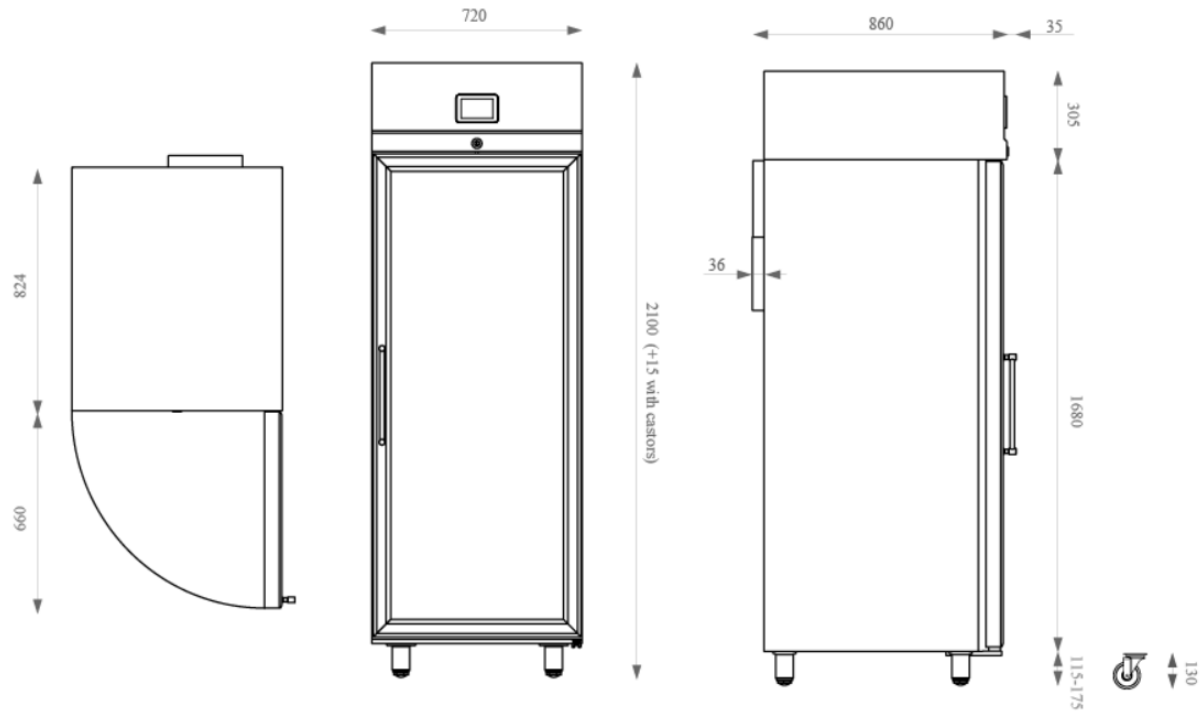
- **WARNING:** No naked flame during service or repair.

  During the transportation, installation and handling of the device must be kept in an upright position. Failing to do so, it may cause problems in the operation of the refrigerator.

2. Technical Specifications

The appliance is equipped with a UV lamp for sterilization and an airduct for soft airflow. Humidity is controlled through cycles of the evaporator fan and compressor operation.

Dimensions



Electrical Characteristics

230V / 50 Hz / 5,1 A

Temperature and Humidity Range

0 / +10 °C, 60 – 90 % RH

Total load capacity

100kg

3. Operation

Organize meat on shelves based on size, preventing overcrowding for proper air circulation. If needed, adjust shelves to accommodate different meat cuts.

Do not exceed the maximum total load capacity (100Kg).

Navigating the menus is intuitive, based on touch technology.

- To enter a procedure, touch the menu or the corresponding icon.
- To exit the procedure and, in general, to return to the previous level, press the Back key.
- To scroll up and down a menu, use the and keys.
- To confirm the settings and/or changes, press the OK key.
- To start up a cycle, press START.
- To interrupt a cycle, hold down STOP for at least 4 seconds.
- To regulate a setting, use the – and + keys or press and drag the relevant bar.
- To silence the buzzer, touch any key while it is sounding.

3.1 Powering On/Off

Connect the power supply to the appliance, after a few seconds it will show the EVCO splash screen.

EVCO splash screen

Once loading is complete, the device will display the mode it was in before being powered down:

- On/stand-by screen, press the central area to move to the Home screen

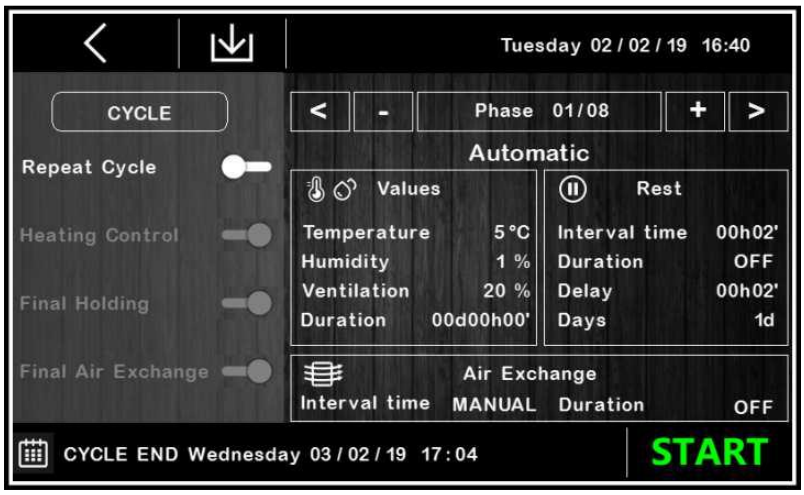
- the Home screen

On/stand-by screen

Home screen

Press the hand icon on the home screen  in order to proceed to the run screen.

Once the manual cycle has been started up, the Run screen will appear.



To start up the cycle, press START and the Run screen will appear for the type of cycle selected.

3.2 Run Screen

While a manual or automatic cycle is being run, the status of the principal loads is displayed as icons on the upper part of the screen. The table below gives their description when switched on:

	compressor active
	heating active (not applicable)
	heating control not active (not applicable)
	fans working
	defrosting in progress
	humidification in progress
	dehumidification in progress
	humidity control not active
	alarm in progress

While a manual or automatic cycle is being run, the lower part of the screen displays the function keys, which are as follows.

switch light on/off

access the modify working setpoint/set cycle pages and the service screen

manual activation of rest cycle

manual activation of smoking cycle (not applicable)

manual activation of air change cycle (not applicable)

manual activation of sterilisation cycle (not applicable because it is always on)

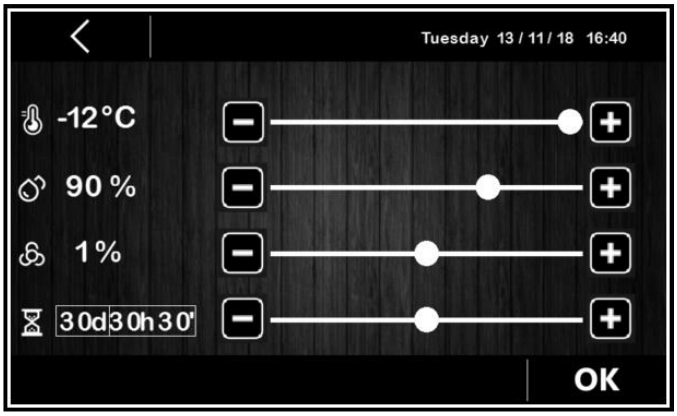
manual activation of defrosting cycle (presence can be activated/deactivated from parameter)

saving and modifying programs and operation data

3.3 Temperature and humidity control

All settings (temperature, humidity) are already factory preset.

In order to change the temperature and humidity settings press the key or the whole area of the T and RH display (with a resolution of 0.1°C for the temperature), the setpoint settings screen for the cycle in progress will appear.



Setpoint settings screen

By pressing + or – the setpoint for temperature and humidity can be changed and OK must be pressed each time to confirm the changes.

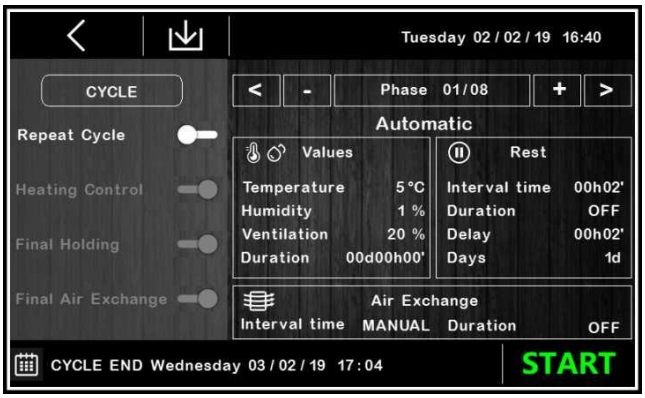
Important Notice: When changing the temperature setpoint you must also set the parameter rU14 equal to the temperature setpoint.

In order to gain access to the parameters menu s*ee* internal parameters at Chapter 3.6

3.4 Automatic Cycles

If parameter E17 is set at 0 (See Internal parameters at Chapter 3.6) the option for choosing automatic cycles in the home screen will appear:

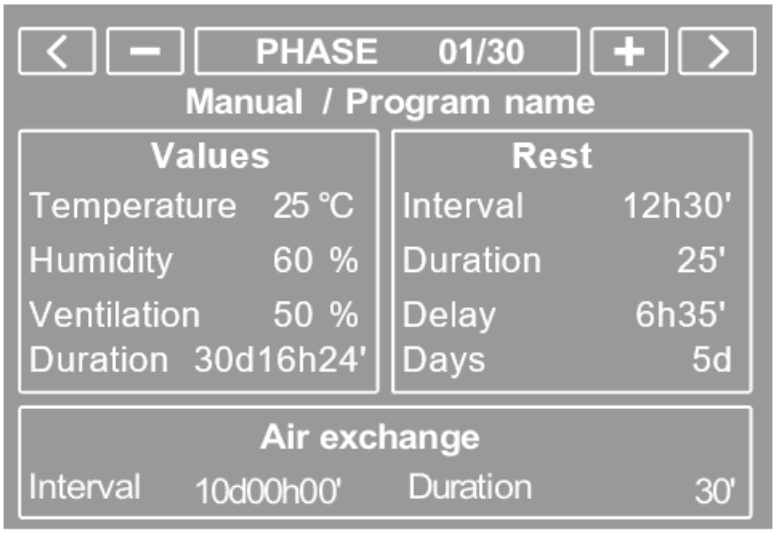
The controller provides complete control for cycles selected by the user.



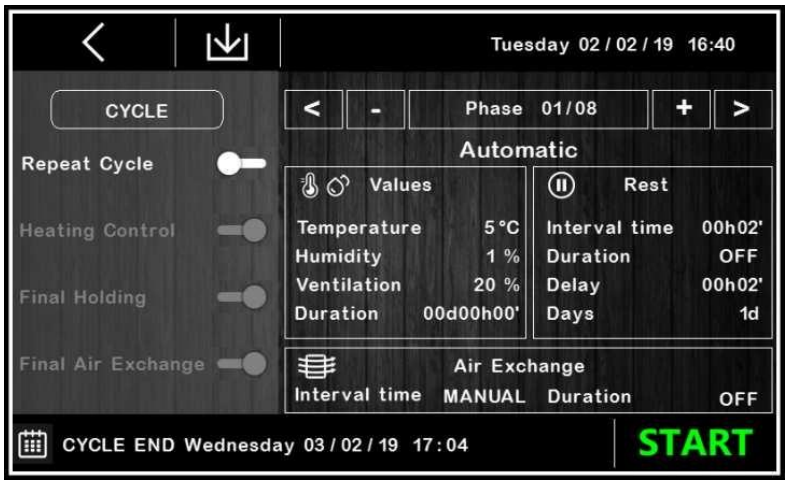
After a modification the settings will be saved provided that:

- an immediate START
- pressure on button saving data if the start is not immediate. Note: pressure on button "<" withoutsaving data will cancel the modifications.

An automatic aging cycle can consist of a maximum of 30 different sequential phases, for each of which the user can set the temperature, humidity and rest period:



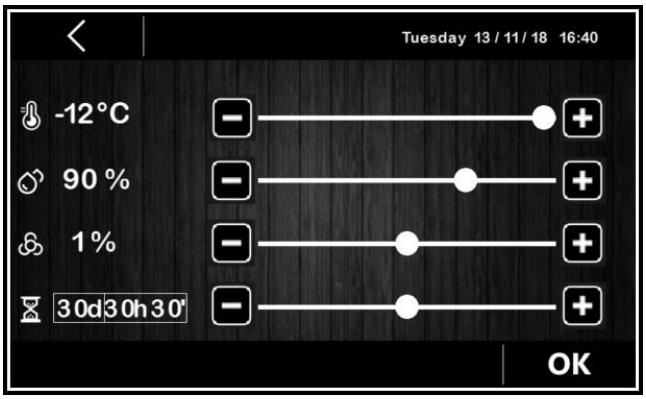
The automatic cycle starts up when the START area is pressed and it terminates automatically at the end of the last set phase, at which time a buzzer sounds.



The cycle can be interrupted manually during any phase by holding the STOP key down for 4 seconds.

Important Notice: the final holding phase is optional (it must be enabled during the general set-up of the cycle) and duration settings cannot be made in it, so if it is enabled, it can only be stopped manually by pressing the key STOP.

Before starting up a cycle, it is possible to consult and modify the settings of each of the stages in the aging cycle.



Once OK has been pressed each time to confirm the changes, these will be saved and used as the settings for the automatic cycle which is started up:

- by pressing the START area
- saving with button
- the modifications will not be saved unless when starting the cycle.

The CYCLE END icon is displayed on the bottom left of the screen: it indicates the day and time for the end of the aging cycle, which is the sum of times set for each individual phase. The date and time of the end of the cycle have no significance as far as the programme being set is concerned, they are just a reference for the user.

To save the set cycle before it is started up, press the icon at the top left of the screen: scroll through the pages of the recipe book with the list of recipes using the or keys and choose the desired position in which to save the recipe, giving it a new name or overwriting an existing recipe. When the operation has been completed, press the OK key to confirm.

3.5 Recipe book

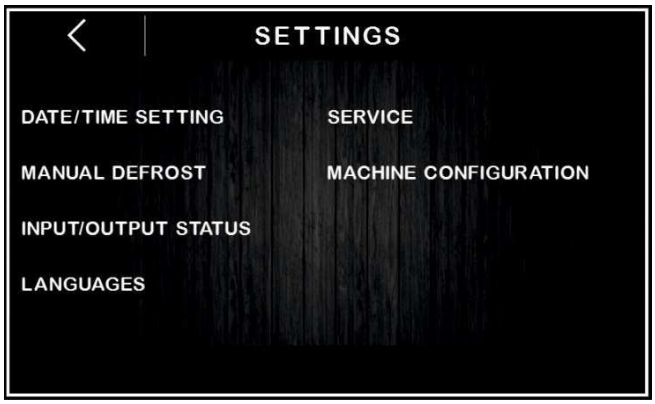
This area grants access to the MY RECIPES screen listing the automatic/manual aging cycles saved with the name by the user, following the procedure described in the previous section 3.5. Users can save up to 10 recipes.

Press the name of the required recipe to gain direct access to the automatic cycle start-up page, from which it is possible to run a cycle or enter the various phases to change the settings and to create a new recipe from it, which can also overwrite an existing recipe or save it with a different name (see section 3.5).

Note: It is not possible to use dashes in memory names and when such a recipe on the list is pressed there will be no effect

3.6 Settings screen

The settings key on the On/Stand-by screen grants access to the Set-up screen with the relevant function menu (for the INPUTS/OUTPUTS STATUS function, data are only displayed). To access the various procedures, touch the screen near the information/function required. The following screen is displayed:



The service option gives access to the following menu:

RECORDINGS SET-UP

This enables selection of the variables to be recorded for the HACCP history.

RESTORE FACTORY DATA

Touching on this option grants access to the following password-protected functions (149):

- delete records
- restore default parameters
- delete recipes

INTERNAL PARAMETERS

Touching on this option grants access to the password-protected parameter configuration **(-19);** to configure the parameter appropriately, consult the list in the chapter 3.7 Parameters.

3.7 Parameters

The table below describes the configuration parameters of the device.

Par.	Min	Max	Unit	Default	Analogue inputs
CA1	-25.0	25.0	°C	0.0	cabinet probe offset
CA2	-25.0	25.0	°C	0.0	evaporator probe offset
CA3	-25.0	25.0	°C	0.0	condenser probe offset
CA4	-25	25	% r.H.	0	humidity probe offset
CA5	-5.00	5.00	---	0.00	pH probe offset
P0	0	1	- - - -	1	type of probe 0 = PTC 1 = NTC
P2	0	1	- - - -	0	temperature measurement unit 0 = °C 1 = °F NB.: variations to the value of parameter P2 are only effective after the board has been reset
P3	0	1	- - - -	1	enable evaporator probe 0 = disabled 1 = enabled
P4	0	1	- - - -	0	enable condenser probe 0 = disabled 1 = enabled
P5	0	60	min	15	duration of the power failure above which the alarm "power failure" is displayed
P6	- - - -	- - - -	- - - -	- - - -	unused
P7	0	P8	% r.H.	0	lower calibration limit of the humidity transducer (corresponding to 4 mA)
P8	P7	100	% r.H.	100	upper calibration limit of the humidity transducer (corresponding to 20 mA)
P9	0	1	- - - -	0	enable pH probe (only if rU0 = 1 or 2) 0 = disabled 1 = enabled
P10	-5.00	P11	% r.H.	0.00	lower calibration limit of the pH transducer (corresponding to 4 mA)
P11	P10	10.00	% r.H.	7.00	upper calibration limit of the pH transducer (corresponding to 20 mA)
Par.	**Min**	**Max**	**Unit**	**Default**	**Cooling regulator**
rC0	1.0	15.0	°C	2.0	cooling regulation differential
rC1	-50.0	99.0	°C	-20.0	minimum setpoint that can be set
rC2	-50.0	99.0	°C	20.0	maximum setpoint that can be set
rC3	0.0	10.0	°C	1.0	cooling neutral zone value
Par.	**Min**	**Max**	**Unit**	**Default**	**Heating regulator**
rH0	1.0	15.0	°C	2.0	heating differential
rH3	0.0	10.0	°C	1.0	neutral zone value
rH6	1	600	s	60	cycle time for heater switch-on if heating is required (see also rH7)

rH7	1	600	s	45	heater switch-on time within the rH6 cycle time
rH8	0	600	min	15	duration pause at beginning of phase
+Par.	**Min**	**Max**	**Unit**	**Default**	**Humidity regulator**
rU0	0	3	- - - -	0	humidity management mode: 0 = with humidity probe 4 -20 mA EVHTP523 1 = without humidity probe, time intervals based on the percentage set 2 = with humidity probe EVHTP500 3 = with humidity probe EVHTP520
rU1	-50.0	99.0	°C	0.0	minimum cabinet temperature for inhibiting humidification control
rU2	1	600	s	60	cycle time for humidifier switch-on (only for rU0 = 1, see also rU3)
rU3	1	600	s	30	humidifier switch-on time rU2 cycle time to generate 100% humidity in cabinet (only for rU0 = 1, see also rU2)
rU4	0	1	- - - -	0	temperature priority 0= no 1= yes (temperature setpoint is satisfied and then the device controls the humidity)
rU5	1	100	% r.H.	5	dehumidification differential
rU6	0	100	% r.H.	2	dehumidification neutral zone value
rU7	0	255	s	10	duration of dehumidification attempt with pump-down solenoid valve
rU8	1	100	% r.H.	5	humidification differential
rU9	0	100	% r.H.	2	humidification neutral zone value
rU10	0	50	% r.H.	10	humidification proportional band value (only for E12=0)
rU11	0	255	s	30	cycle time for humidification proportional regulation (only for E12=0)
rU12	0	1	- - - -	0	time base for humidification proportional regulation cycle time (only for E12=0): 0 = seconds 1 = minutes
rU13	0	100	%	80	maximum humidity setpoint that can be set
rU14	-50.0	99.0	°C	0.0	minimum cabinet temperature for inhibiting dehumidification control
rU15	0	300	s	60	humidifier pause time (only if E12=1)
rU16	0	60	s	3	humidifier activation time (only if E12=1)
Par.	**Min**	**Max**	**Unit**	**Default**	**Compressor protection**
C0	0	240	min	0	compressor switch-on delay from device switch-on
C1	0	240	min	2	delay between two compressor switch-ons
C2	0	240	min	0	minimum compressor-off duration
C3	0	240	s	0	minimum compressor-on duration
C4	0	240	min	0	compressor activation time during dehumidification
C6	0.0	164.0	°C	70.0	condensation temperature above which the condenser overheat alarm sounds
C7	0.0	164.0	°C	80.0	condensation temperature above which the compressor locked alarm sounds

C8	0	15	min	1	compressor locked alarm delay
C9	0	999	min	10	time compressor ON during temperature probe error
C10	0	999	min	10	time compressor OFF during temperature probe error
Par.	**Min**	**Max**	**Unit**	**Default**	**Defrosting**
d0	0	99	h	6	automatic defrost interval 0 = defrost at intervals is never repeated
d1	0	2	- - - -	0	type of defrost 0 = electrical (during defrosting the compressor is switched off, the defrost output is activated and the evaporator fan switched off). 1 = hot gas (during defrosting the compressor is switched on, the defrost output is activated and the evaporator fan is switched off). 2 = when cycle is reversed (remember to enable an output as the 4-way valve and operation as heat pump)
d2	-50.0	99.0	°C	8.0	defrost end threshold (evaporator temperature); see also parameter d3
d3	0	99	min	30	if parameter P3 is set at 0, defrost duration if parameter P3 is set at 1, maximum defrost duration; see also parameter d2 0 = defrost is never activated
d5	0	99	min	30	reserved
d7	0	15	min	2	drip time (during dripping the compressor and evaporator fan will remain off and the defrost output will be deactivated)
d15	0	99	min	0	minimum consecutive compressor-on duration for starting hot gas defrost when defrost interval elapses (only if parameter d1 is set at 1)
Par.	**Min**	**Max**	**Unit**	**Default**	**Temperature alarms**
A1	0.0	99.0	°C	70.0	evaporator temperature above which the evaporator high temperature alarm is activated; see also parameter A2
A2	-1	240	min	1	delay evaporator high temperature alarm 1 = yes -1 = alarm not enabled
A3	0.0	99.0	°C	70.0	cabinet temperature above which the cabinet high temperature alarm is activated; see also parameter A4
A4	-1	240	min	-1	delay high cabinet temperature alarm -1 = alarm not enabled
A5	0	1	- - - -	0	Polarity of alarm relay output 0 = NO 1 = NC
Par.	**Min**	**Max**	**Unit**	**Default**	**Evaporator and condenser fan**
F0	0	1	- - - -	2	Type of evaporator fan management 0 = single speed on relay output 1 = double speed (HIGH/LOW) on two relay outputs 2 = variable speed on PWM output and TDF EVFDAN1 module

F1	0	1	- - - -	0	evaporator fan activity during the aging phases 0 = parallel function with the compressor 1 = continuous function
F2	0	1	- - - -	0	temperature and humidity management during special air change cycles 0 = management T + RH disabled 1 = management T + RH enabled
F4	0	1	- - - -	0	evaporator fan activity during the final holding phase and during the manual cycle 0 = parallel function with the main loads 1 = continuous function
F5	0	1	- - - -	0	**common** or **separated** fan speed 0= common (the value depends on "Ventilation" and can be changed for dehumidification using F11). 1= separated with F6/F7/F8/F9/F10/F11. The fan value is cancelled from the display and can not be changed (just like when the EVDFAN module is not connected). The value is loaded according the active function
F6	10	100	%	100	Evaporator fan speed in **Cooling** with "F05=1".
F7	10	100	%	100	Evaporator fan speed in **Heating** with "F05=1".
F8	0	100	%	0	evaporator fan speed in **rest** regulation with "F05=1" (when cooling, heating, humidifying and dehumidifying is not active). 0= not active, stop fan.
F9	0	1	- - - -	0	**evaporator fan mode** in **humidifying** with "F05=1": 0= normal fix fan with value F10 1= modulating (according to a ramp)
F10	10	100		50	evaporator fan speed in humidifying **umidifica** With "F05=1" and "F9=1" the speed depends on the humidity value: moving from the active speed at the moment of the humidification request (threshold rU9) to the value F10 (threshold rU8). Uphill or downhill according to the parameters.
F11	0	100	%	100	evaporator fan speed **common** if F5=0 in **dehumidification** if F5=1
F12	0	15	min	2	fan stop after the drip phase
F13	0	250	s	0	evaporator fan switch-off delay from main load switch-off
F14	1	600	s	0	evaporator fan cycle time with compressor switched off (applies both during normal operation and during a product rest phase). If set at 0, cyclical fan switch-on will be deactivated
F15	1	600	s	0	evaporator fan switch-on time within the F14 cycle time (applies both during normal operation and a product rest phase)
F16	0.0	99.0	°C	20.0	condenser temperature above which the condenser fan is switched on (irrespective of the compressor status)
F17	0	240	s	5	condenser fan switch-off delay from compressor switch-off (only applies if the condenser probe is disabled)

F18	0	240	s	15	evaporator fan switch-on delay from when the door is closed, or the door switch input is deactivated
F19	0	100	%	20	minimum evaporator fan speed that can be set
F20	0	100	%	100	maximum evaporator fan speed that can be set
F21	0	100	%	75	evaporator fan start-up speed
F22	1	10	s	5	start-up time when the evaporator fan is switched on
F23	0	100	%	35	evaporator fan min. speed calibration value
F24	0	100	%	65	evaporator fan max. speed calibration value
F25	-50.0	99.0	°C	1.0	evaporator temperature below which the evaporator fan is activated
Par.	**Min**	**Max**	**Unit**	**Default**	**Digital inputs**
i0	0	2	- - - -	2	effect of the door opening, or when the door switch input is activated 0 = no effect 1 = the compressor, evaporator fan and heaters are switched off, the cabinet light is switched on 2 = the evaporator fan and heaters are switched off, the cabinet light is switched on If the door is opened, the humidifier, steriliser/oxygenator and smoker are switched off
i1	0	1	- - - -	1	door switch input contact type 0 = normally open (input active with contact closed) 1 = normally closed (input active with contact open)
i2	-1	120	min	5	door open alarm signal delay -1 = alarm not signalled
i3	0	1	- - - -	1	effect caused by activation of the high pressure input 0 = no effect 1 = the compressor and evaporator fan are switched off, the condenser fan is switched on
i4	0	1	- - - -	0	high pressure input contact type 0 = normally open (input active with contact closed) 1 = normally closed (input active with contact open)
i5	-1	240	s	5	high pressure alarm signal delay -1 = alarm not signalled
i6	0	3	- - - -	2	effect caused by activation of the low pressure input 0 = no effect 1 =ALARM The compressor and evaporator fan are switched off 2 =PUMP-DOWN AND ALARM MANAGEMENT While the compressor is being switched off, the digital input will act to switch off the compressor output to end the pump-down phase. During the activation phases of the refrigeration plant, the digital input will act to switch off the compressor and evaporator fan. 3 = COMPRESSOR THERMAL SWITCH ALARM The compressor is switched off
i7	0	1	- - - -	0	low pressure input contact type 0 = normally open (input active with contact closed) 1 = normally closed (input active with contact open)

i8	-1	240	s	10	low pressure alarm signal delay -1 = alarm not signalled
i9	0	240	s	40	re-arm time for the low pressure switch when the compressor is switched on (only if i6 = 2)
i10	0	1	- - - -	0	thermal switch input contact type 0 = normally open (input active with contact closed) 1 = normally closed (input active with contact open)
i11	-1	240	s	5	thermal switch alarm signal delay -1 = alarm not signalled
Par.	**Min**	**Max**	**Unit**	**Default**	**Digital outputs**
u1	0	1	- - - -	0	Type of icon associated with the steriliser/oxygenator key and load 0 = steriliser 1 = oxygenator

u2	0	240	s	90	if i6 = 0 or 1:
					compressor deactivation delay from pump-down valve switch-off (pump-down being switched off)
					if i6 = 2:
					maximum pump-down duration in compressor switch-off mode without activating the low pressure input, causing the compressor to switch off and the pump-down alarm to sound
					0 = no alarm signal

u3	0	600	s	15	compressor activation/deactivation delay in relation to the 4-way valve when heat pump is in operation
u4	0	1	- - - -	1	Dehumidification management type 0 = dehumidifier/extractor fan (with this setting parameters rU5 and rU6 are relevant) 1 = management by activating the refrigeration plant

u01c	0	23	- - - -	0	Load associated with output K1 0 = compressor 1 = cabinet light 2 = humidification 3 = air change 4 = heater 5 = defrosting 6 = pump-down solenoid valve 7 = condenser fan 8 = alarm 9 = steriliser/oxygenator 10 = smoker 11 = steam generator 12 = dehumidification 13 = evaporator fan 14 = low speed evaporator fan 15 = high speed evaporator fan 16 = 4-way valve 17 = Valve V1 18 = Valve V2 19 = Valve V3 20 = Valve V4 21 = Valve V5 22 = Valve V6 23 = Valve V7
u02c	0	23	- - - -	1	Load associated with output K2 (see u01c)
u03c	0	23	- - - -	2	Load associated with output K3 (see u01c)
u04c	0	23	- - - -	3	Load associated with output K4 (see u01c)
u05c	0	23	- - - -	4	Load associated with output K5 (see u01c)
u06c	0	23	- - - -	8	Load associated with output K6 (see u01c)
u07c	0	23	- - - -	7	Load associated with output K7 (see u01c)
u08c	0	23	- - - -	6	Load associated with output K8 (see u01c)
u09c	0	23	- - - -	5	Load associated with output K9 (see u01c)
u10c	0	23	- - - -	9	Load associated with output K10 (see u01c), only with expansion
u11c	0	23	- - - -	10	Load associated with output K11 (see u01c), only with expansion
u12c	0	23	- - - -	11	Load associated with output K12 (see u01c), only with expansion
u13c	0	23	- - - -	12	Load associated with output K13 (see u01c), only with expansion
Par.	**Min**	**Max**	**Unit**	**Default**	**Serial communication (serial port type RS-485 with MODBUS communication protocol)**
L1	1	240	min	10	internal data sampling time
PA1	426	-99	999	- - - -	EPoCA level 1 password
PA2	824	-99	999	- - - -	EPoCA level 2 password

bLE	1	0	99	- - - -	Serial port connectivity configuration 0 = free 1 = forced for EPoCA 2-99 = EPoCA local network address
LA	1	247	- - - -	247	device address
Lb	0	3	- - - -	2	baud rate 0 = 2,400 baud 1 = 4,800 baud 2 = 9,600 baud 3 = 19,200 baud
LP	0	2	- - - -	2	parity 0 = none 1 = odd 2 = even
Par.	**Min**	**Max**	**Unit**	**Default**	**Other**
E7	-99	99	- - -	0	password to unlock screen saver 0 = not enabled
E8	0	240	min	1	inactivity period for enabling screen-saver 0 = not enabled
E9	0	1	- - - -	1	display EVCO splash screen at power-on 0 = neutral screen 1 = EVCO splash screen
E11	0	120	s	10	duration of buzzer at end
E12	0	1	- - - -	0	type of humidifier 0 = humidifier with steamer 1 = humidifier with instant generation
E13	0	240	min	10	duration of "cycle completed" display 0 = not enabled
E14	- - - -	- - - -	- - - -	- - - -	unused
E15	0	1	- - - -	0	Enable 4 relay expansion EVC20P52N9XXX10
E16	0	1	- - - -	0	Enable heat pump operation 0 = disabled 1 = enabled If set to 1, the only type of defrost possible is with the 4-way valve
E17	0	1	- - - -	0	Disable programs 0= No 1=Yes
E18	0	1	- - -	0	Use matrix valve during dehumidification with compressor 0= 1st column compressor 1= 3rd culumn dehumidification
E19	0	1	- - -		Enable heaters during dehumidification with compressor 0 = disabled 1 = enabled

3.8 Alarms

An alarm event is signalled by a prolonged buzzer sound and it can be seen when the  icon appears on the upper part of the screen. The type of alarm is shown in text on the lower part of the screen. The text does not appear on the settings page and if an alarm situation happens while the display is in screen-saver mode, the menu currently in use appears on the display.To silence the buzzer, touch the screen at any point, while to remove the signal icon touch the screen over this and access the page listing the alarms on which those that are active are shown with the word ON alongside.

In the initial use of the refrigerator, you may experience a low humidity alarm due to the continuous operation of the appliance as it works to reach the setpoint for the first time. This is a normal process, and the humidity levels will stabilize once the optimal conditions are achieved.

The table below lists the alarms that may be signalled.

Alarm	Meaning
HIGH TEMP. EVAPOR.	Maximum evaporator temperature alarm. To correct: - check the evaporator temperature - check the value of parameters A1 and A2 Main results: - all loads are deactivated
HIGH TEMP. CABINET	Maximum cabinet temperature alarm. To correct: - check the cabinet temperature - check the value of parameters A3 and A4 Main results: - all the loads are deactivated until the alarm stops - the word alarm will disappear only when that area is pressed.
DOOR OPEN	Door open alarm. To correct: - check the condition of the door - check the value of parameters i0, i1 and i2. Main results: - the effect set by parameter i0.
HIGH PRESSURE	High pressure alarm. To correct: - check the state of the high pressure input - check the value of parameters i3, i4 and i5. Main results: - the effect set by parameter i3.

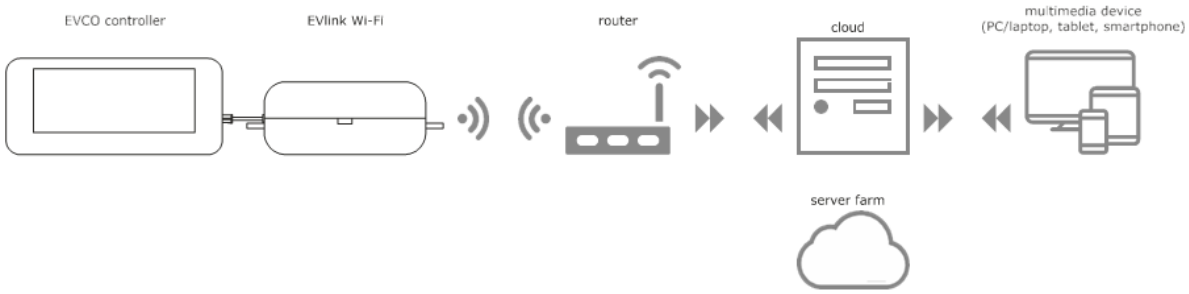
LOW PRESSURE	Low pressure alarm. To correct: - check the state of the low pressure input - check the value of parameters i6, i7, i8 and i9. Main results: - the compressor and evaporator fan are switched off
COMPRESSOR THERMAL SWITCH	Compressor thermal switch alarm. To correct: - check the state of the compressor thermal switch input. - check the value of parameters i6, i7 and i8. Main results: - the compressor is switched off
THERMAL SWITCH	Thermal switch alarm. To correct: - check the state of the thermal switch input. - check the value of parameters i10 and i11. Main results: - all loads are deactivated
POWER FAILURE	Power failure during a cycle run alarm (if the power failure is greater than P5) To correct: - check the device-power supply connection
CONDENSER OVERHEAT	Condenser overheat alarm. To correct: - check the condenser temperature - check the value of parameter C6. Main results: - the condenser fan will be switched on.
COMPRESSOR LOCKED	Compressor locked alarm. To correct: - check the condenser temperature - check the value of parameters C7 and C8 - disconnect the device from the power supply and clean the condenser. Main results: - if the error occurs during an operating cycle, the cycle will be interrupted.
PUMP-DOWN	Pump-down alarm To correct: - check the maximum pump-down time set by parameter u2 - the alarm will be re-armed when the compressor is next activated or by pressing the buzzer silencing key Main results: - compressor switched off

CABINET PROBE	Cabinet probe error. To correct: - check the value of parameter P0 - check the integrity of the probe - check the device-probe connection - check the cabinet temperature. Main results: - if the error occurs during "stand-by", it will not be possible to start up an operating cycle - if the error happens during a cycle, the compressor will work according to C9-C10 - the dehumidification with compressor is suspended
EVAPORATOR PROBE	Evaporator probe error. To correct: - the same as for the cabinet probe error but with reference to the evaporator probe. Main results: - if parameter P3 is set to 1, defrosting will last for the time set by parameter d3
CONDENSER PROBE	Condenser probe error. To correct: - the same as for the cabinet probe error but with reference to the condenser probe. Main results: - the condenser fan will operate in parallel with the compressor - the condenser overheat alarm will never be activated - the compressor locked alarm will never be activated
HUMIDITY PROBE	Humidity transducer error. To correct: - check transducer integrity - check the device-transducer connection - check cabinet relative humidity. Main consequences if parameter rU0 is set to 0: - the cycle will be temperature controlled only.
RTC	Clock error. To correct: - re-set the date and time. Main results: - the device is unable to start up automatic cycles - any automatic cycles in progress will be blocked.
POWER BOARD INCOMP.	User interface-control module compatibility error. To correct: - check that the user interface and the control module are compatible. Main results: - cycle in progress interrupted.
NO COMMUN.	User interface-control module communication error. To correct: - check the user interface-control module connection. Main results: - cycle in progress interrupted

ESP INCOMPATIBILITY	Compatibility error with expansion board **(if E15 = 1).** To correct: - check that the user interface and the expansion board are compatible.
NO ESP COMMUN.	Communication error with expansion board **(if E12 = 1).** To correct: - check the user interface-expansion board connection.

4. Connection to the Wi-Fi

4.1 First-time use of EVlink Wi-Fi



Schematic Diagram

Power up the refrigerator and EVlink Wi-Fi will go into temporary set-up mode. During this mode:

EVlink Wi-Fi acts as both an access point (identifying a Wi-Fi network called Epoca followed by 6 alphanumeric characters, for example Epoca279A8E) and a data logger for the connected controller.

After 120 s (240 for the first-time use) in set-up mode, EVlink Wi-Fi will automatically go into run mode if the control panel has not been accessed (point 9 of this paragraph). During this mode:

- EVlink Wi-Fi acts as a data logger for the connected controller
- there is no connection with the cloud server.

1. Scan the Wi-Fi networks using the multimedia device and identify a network called Epoca followed by 6 alphanumeric characters.

   If the scan detects more than one network called Epoca, make sure only one EVlink Wi-Fi is being powered.

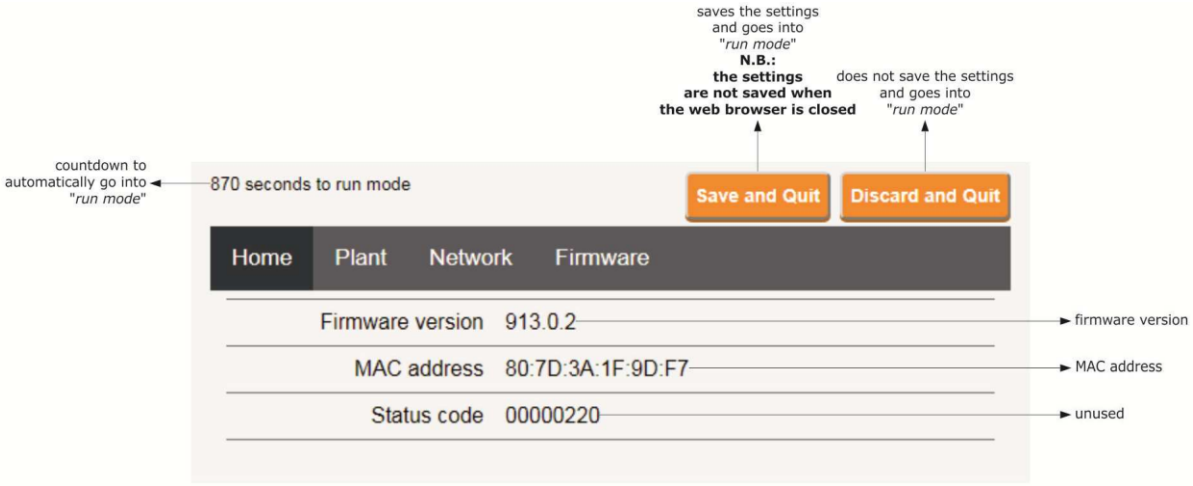
2. Connect to the Epoca network. In the Security key field enter the password **epocawifi**.

3. Open the web browser on the multimedia device and enter the address 192.168.4.1 in the address bar.

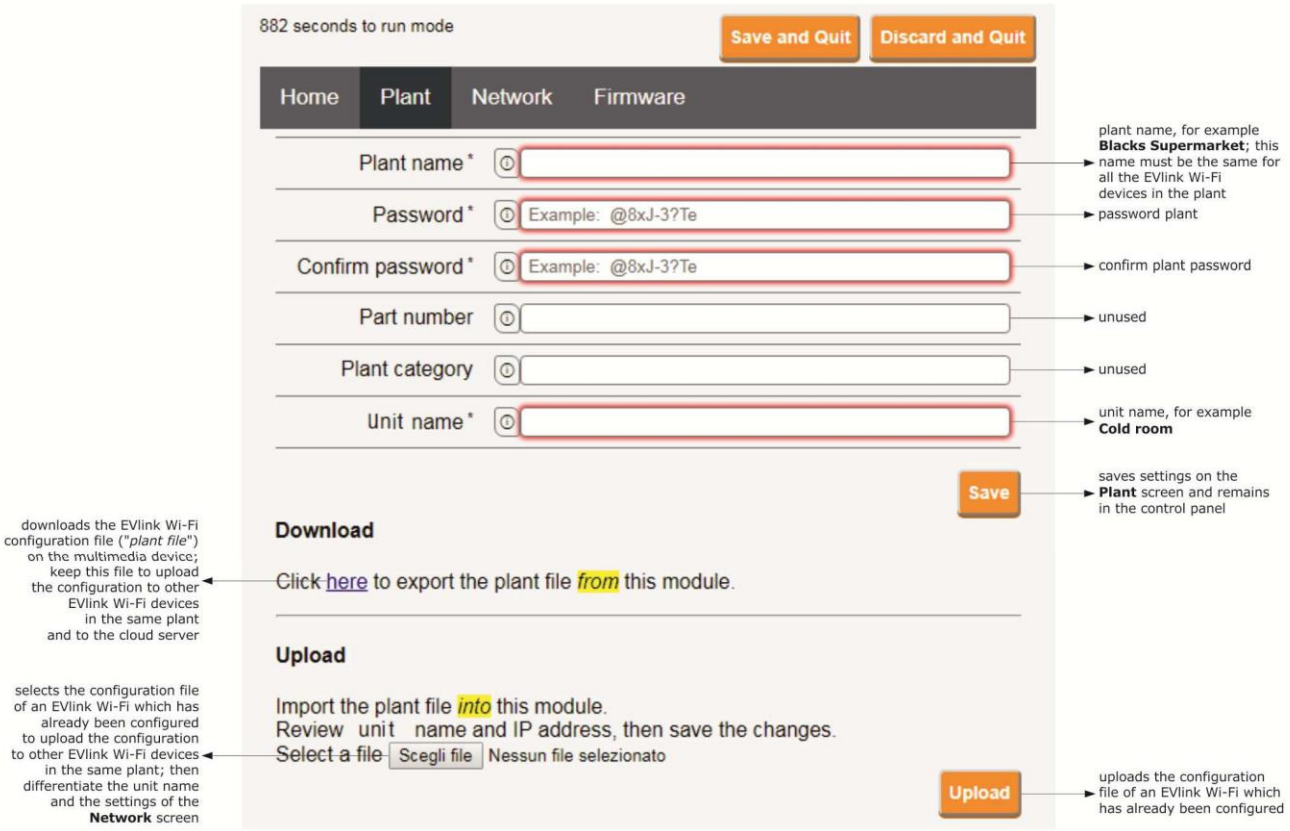
4. The Home screen of the EVlink Wi-Fi control panel will be displayed. EVlink Wi-Fi will go into temporary set-up mode. During this mode:

   - EVlink Wi-Fi acts as an access point but it cannot be accessed with another multimedia device
   - there is no connection with the cloud server

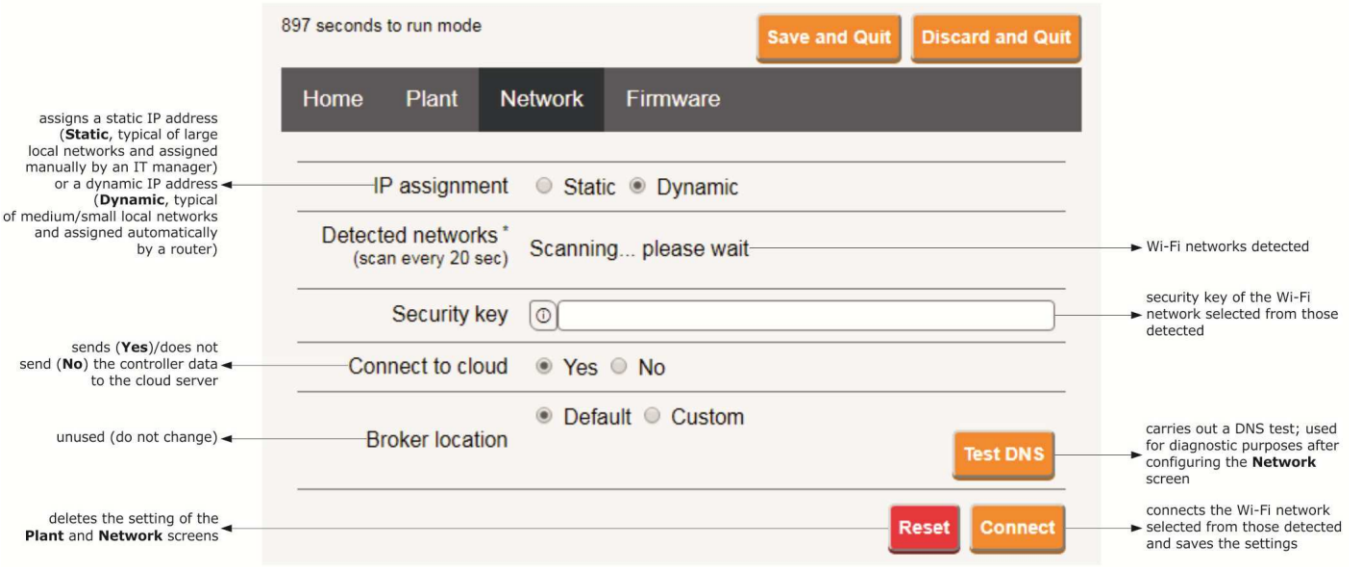
   After 5 min in set-up mode, EVlink Wi-Fi will automatically go into run mode if the control panel has not been accessed.



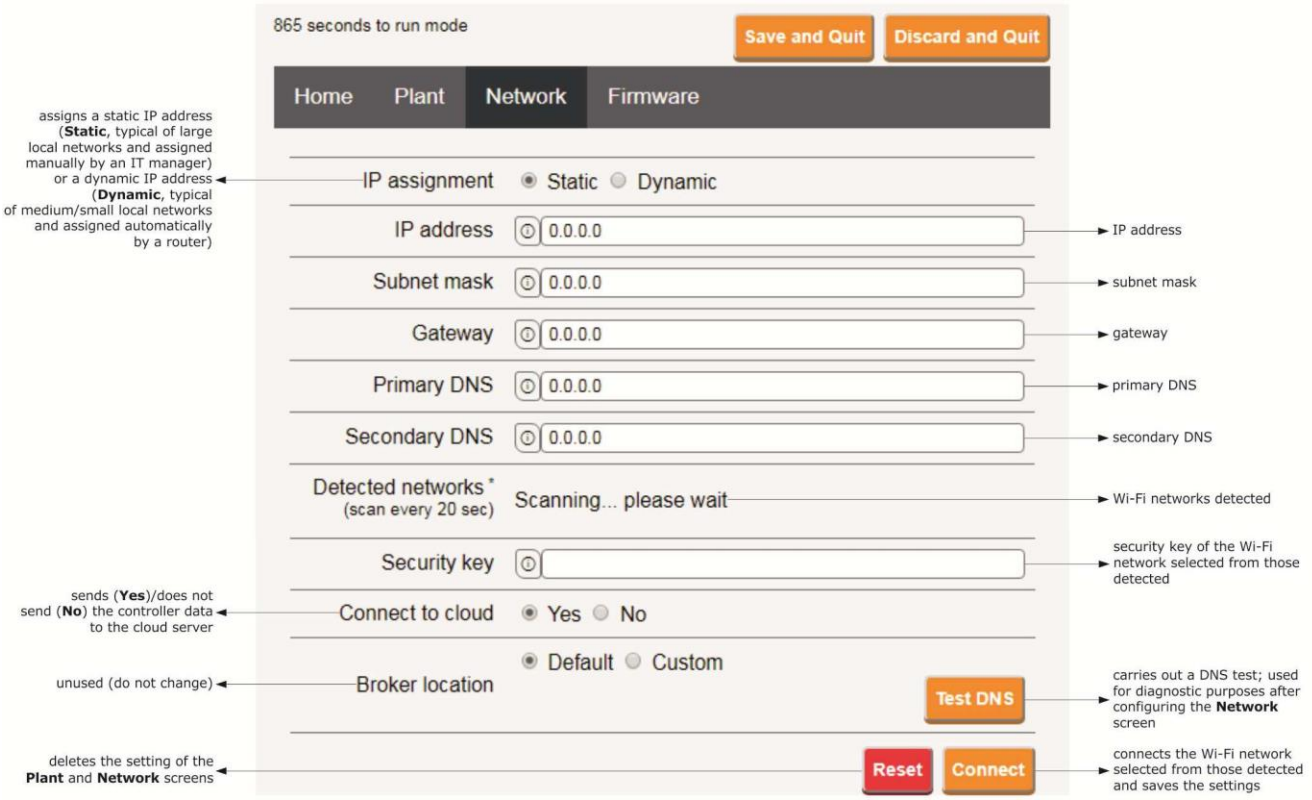
5. Select the Plant screen on the EVlink Wi-Fi control panel. The fields in red are mandatory.



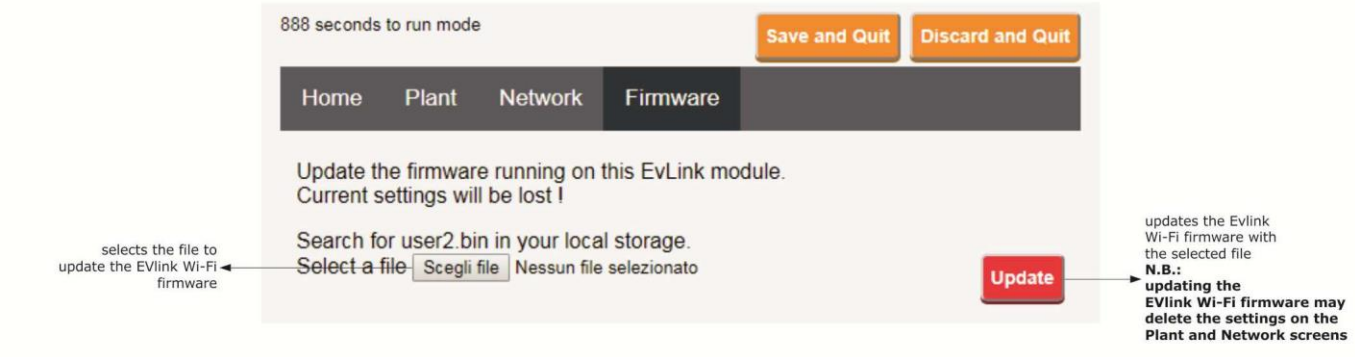
6. Select the Network screen on the EVlink Wi-Fi control panel.



If the IP addresses are statically assigned, select the **Static** button



7. Select the Firmware screen on the EVlink Wi-Fi control panel.



8. Disconnect the refrigerator from the power source.

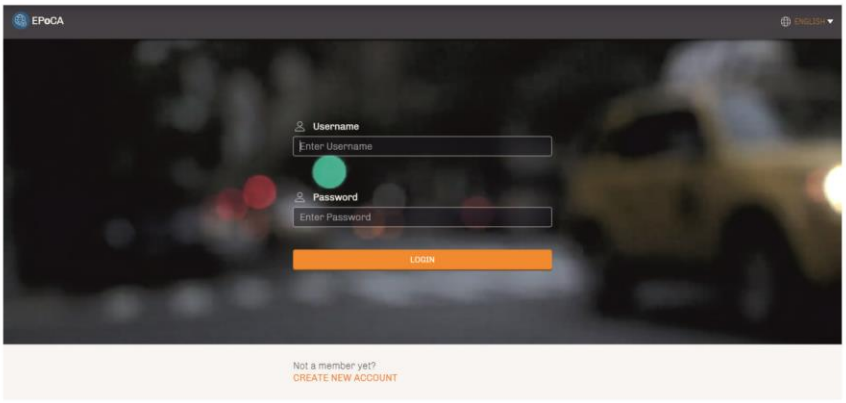
9. Power up the refrigerator.

4.2 Description of the EVlink Wi-Fi LEDs

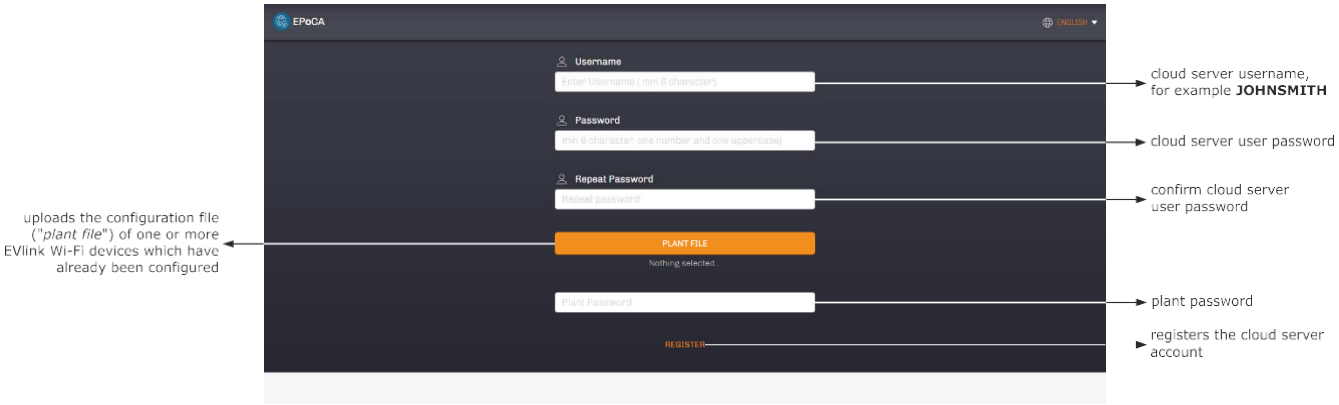
LED	ON	OFF	SLOW FLASH	RAPID FLASH
red (MODBUS communication status)	-	no MODBUS activity	MODBUS activity	-
green (Wi-Fi communication status)	connection with both the Wi-Fi network and the cloud server		no connection with the Wi-Fi network	connection with the Wi-Fi network, no connection with the cloud server

4.3 First access to the cloud server

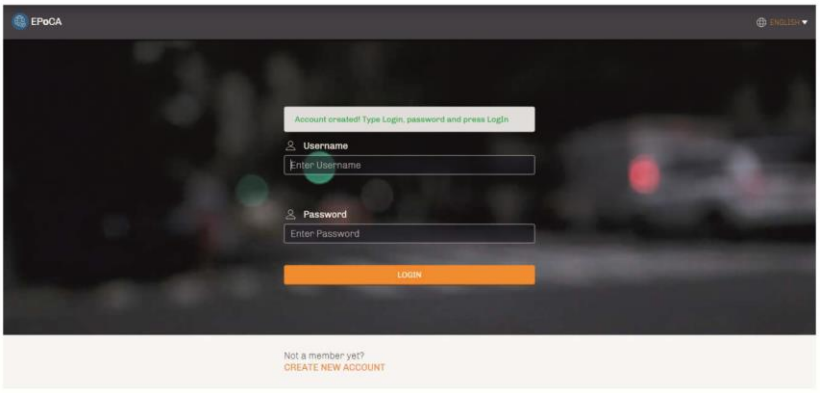
1. Open the web browser on the multimedia device and open the web page epoca.cloud. The Login screen will be displayed.

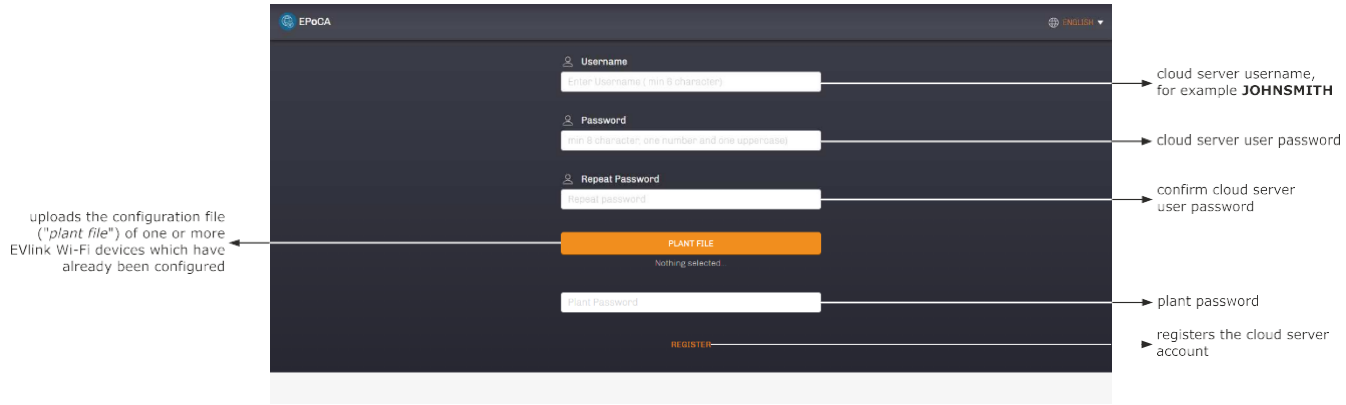


2. Select CREATE NEW ACCOUNT. The New account screen will be displayed.



3. Select REGISTER. The Account created OK screen will be displayed.





4.4 Subsequent uses of EVlink Wi-Fi

1. Scan the Wi-Fi networks using the multimedia device and identify a network called Epoca followed by 6 alphanumeric characters and the name of the device, for example Epoca279A8E Cold room.

2. Connect to the Epoca network.

In the Security key field enter the password **epocawifi**

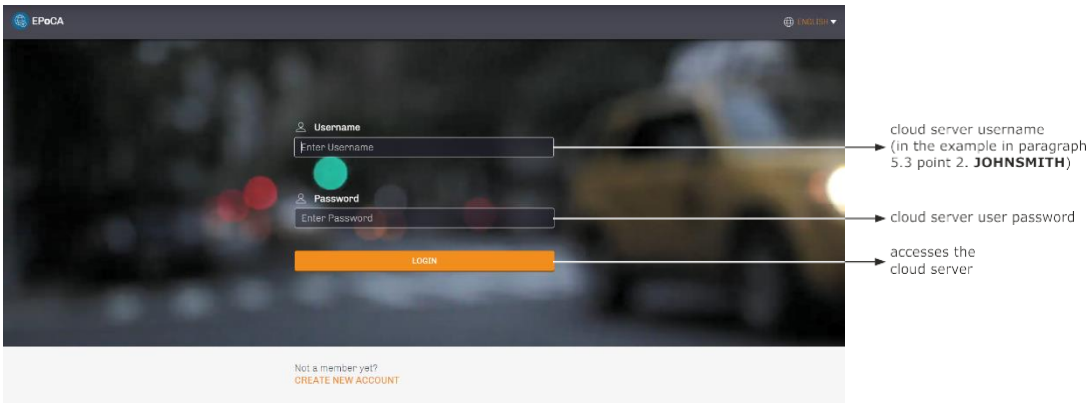
3. Open the web browser on the multimedia device.

Enter the address 192.168.4.1 in the address bar.

4. The Login screen will be displayed.

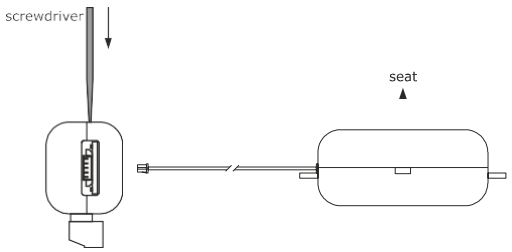
4.5 Subsequent accesses to the cloud server

Open the web browser on the multimedia device and open the web page **epoca.cloud**. The **Login** screen will be displayed.



4.6 Resetting the factory settings

1. Disconnect the appliance from the power source.
2. Remove the top cover of EVlink Wi-Fi located in the top of the appliance, by gently applying pressure with a screwdriver in the slot.



3. Make a note of the password on the label inside the top cover of EVlink Wi-Fi.

1234567890ABCDEF

4. Click the top cover of EVlink Wi-Fi back into place.
5. Power up the controller and connect the independent EVlink Wi-Fi power supply, if used, to the power source.

6. Scan the Wi-Fi networks using the multimedia device and identify a network called Epoca followed by 6 alphanumeric characters and the name of the device, for example Epoca279A8E Cold room.

7. Connect to the Epoca network.

   In the Security key field enter the password **epocawifi**.

8. Open the web browser on the multimedia device.

   Enter the address 192.168.4.1 in the address bar.

9. The Login screen will be displayed.

   Type in resetPlant in the Plant name field. Enter the password found on the label inside the top cover of EVlink Wi-Fi in the Plant password field.

5. Cleaning and Maintenance

5.1 Regular Cleaning and maintenance

For correct operation and protection of your appliance, frequent cleaning is recommended.

Before cleaning, always disconnect the plug from the electrical supply

Do **not use sharp** or other similar objects which may damage your appliance.

Clean the inside and outside surfaces with a **mild soap** solution**.**

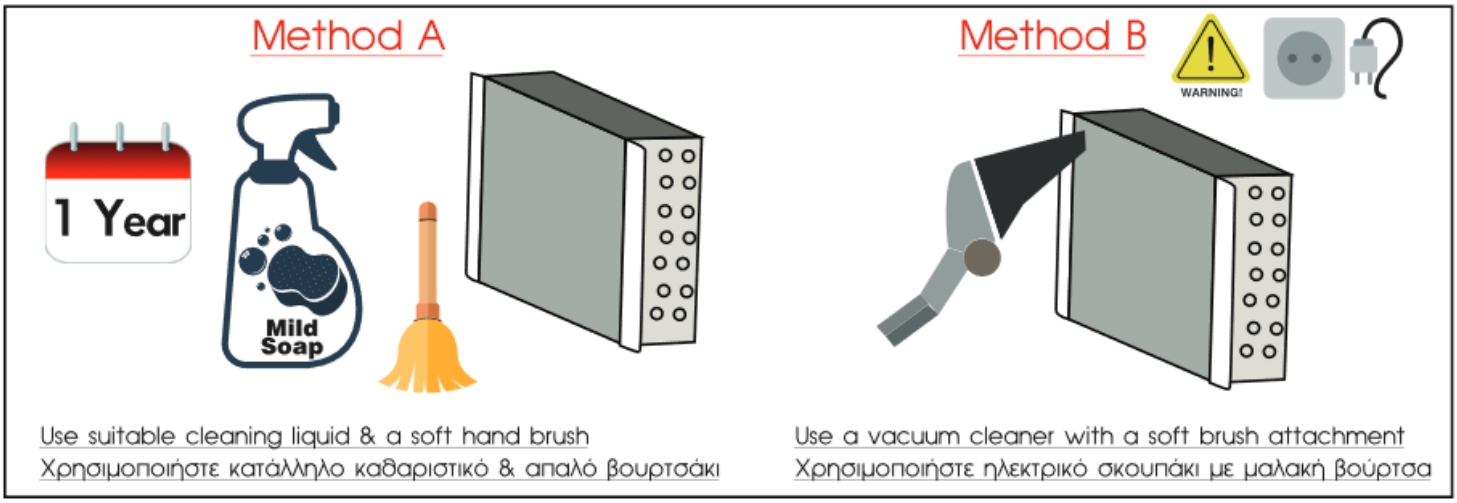
Do not use detergents or substances based on chlorine or acid solvents. These may cause corrosion of stainless steel surfaces or and the copper pipes of the evaporator.

Never clean the appliance with jets of water, whether direct or pressurized

For easier cleaning of the interior of the appliance, you can remove the shelves, the removable guides and removable support bars.

After the **first year** of service, maintenance should be performed by a **qualified technician**, who will recommend the **maintenance frequency** according to the working environment of your appliance.

Before maintenance, always disconnect the plug from the electrical supply



5.2 UV Lamp Maintenance

Check in regular basis that the UV lamp is operating by inspecting the rear of the UV box to verify the presence of a blue light.

In any case replace the lamp every 6 to 8 months to ensure optimal performance in sterilization.

Regularly changing the lamp ensures continued effectiveness in maintaining a sterile environment for optimal meat storage.

Should you detect any undesirable odors emanating from the refrigerator, it is recommended to replace the UV lamp promptly.

Before any maintenance or adjustments, disconnect the refrigerator from the power source. Wait for at least 5 minutes after turning off the refrigerator to allow the lamp to cool down. Remove the bottom cover of the UV box by unscrewing the 2 screws and replace the UV lamp.

Dispose of the UV lamp in accordance with local regulations and environmental guidelines. Follow proper disposal procedures to minimize environmental impact.