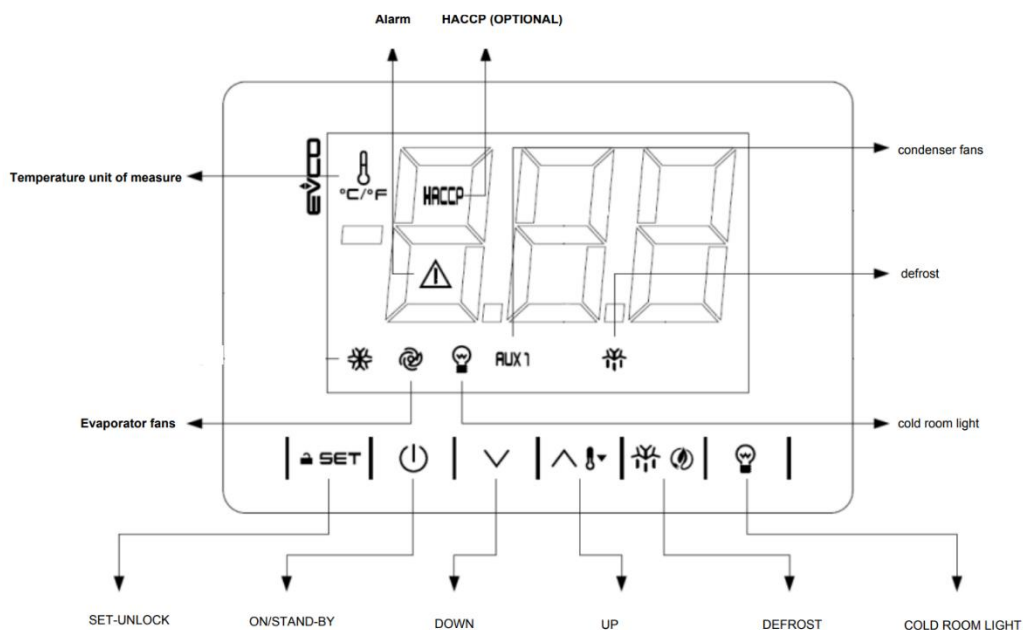


MOD : WR-C2020-6M-R2

Production code : CFDD0002B+IPAM401B R290

1.1 Control panel

The description of the commands on the machine is reported below.



Below the summary table of the commands description.

LED	ON	OFF	BLINKING
	compressor on	compressor off	- compressor protection activated - setpoint setting in progress
	evaporator fan on	evaporator fan off	stop of the evaporator fan activated (for example, post-defrosting)
	cold room light on	cold room light off	cold room light turned on from a digital input
AUX 1	condenser fans on	condenser fans off	- condenser fans activated from a digital input - delay of the condenser fan user activated
	defrosting and pre-dripping activated	-	- defrosting delay activated - dripping activated
	time display	-	setting date, time and day of the current week
HACCP (only with Wi-Fi module, optional)	HACCP alarm in memory	-	new HACCP alarm in memory
	active alarm	-	-

1.2 Reference norms

The designing and the manufacturing of the Monoblock are realized in compliance with:

DIRECTIVE PED 2014/68/EU and harmonised standards

- UNI EN 378-1 Refrigerating systems and heat pumps – Safety and environmental requirements – Basic requirements.
- UNI EN 378-2 Refrigerating systems and heat pumps – Safety and environmental requirements – Design, construction, testing, marking and documentation.
- UNI EN 378-3 Refrigerating systems and heat pumps – Safety and environmental requirements – O-site installation and personal protection.

Furthermore, the unit complies with the MACHINERY DIRECTIVE 2006/42/EC, LOW VOLTAGE DIRECTIVE 2014/35/EU, ELECTROMAGNETIC COMPATIBILITY DIRECTIVE 2014/30/EU.

When maintenance / repairing of the Monoblock or check / recovery of the refrigerant gas contained in it become necessary, these operations are regulated by the:

D.P.R. (Decree of the President of the Italian Republic) 146/2018 and Regulation EC N.517/2014

2 Machine use

2.1 Machine use

DANGER: for the machine, only operators correctly trained and informed on the risks present can intervene on the machine and only having fully read this use and maintenance handbook.

The Manufacturer declines all responsibility for any damage to property and/or persons deriving from improper interventions conducted by unqualified, untrained or unauthorised staff.

To conduct the task in question, the following Individual Protection Devices are necessary:



2.1.1 Operation

Before starting the machine, it is necessary to ensure:

- the locking screws are tight;
- the electrical connections were correctly installed;
- the cold room door is closed to ensure the micro-door contact is closed.

2.1.2 Switch on / off

To switch on / off the machine, it is necessary to:

1. press for 3 seconds the key  placed on the control panel.

ATTENTION: after 30 seconds without having operated the keys, the key lock is automatically activated.

2.1.3 Unlocking the keyboard

It is possible to unlock the keyboard by pressing any key for 1 second; the message “Unl” will appear on the display.

2.1.4 Procedure of using

The operation of the Monoblock is regulated by parameters set in the memory of the Manufacturer’s electronic control unit.

It is strongly discouraged to change these values unless strictly necessary and, in any case, always contact only qualified staff- In addition to function, the parameters are divided by level of accessibility:

- Level 1: for end user
- Level 2: for installers

2.1.5 Level 1 parameter variation procedure for end users

Access to this level is direct, i.e., without using any password.

You can do the following:

1. cold room temperature regulation;
2. manual activation of the defrost;
3. turning on / off the cold room light;
4. silencing of the buzzer.

2.1.5.1 Cold room temperature regulation

The ranges of temperatures values in which the controller can operate are:

	Minimum	Maximum
Normal temperature MBP	-5	+5
Low temperature LBP	-25	-15

It is possible to access the regulation setpoint of the temperature in a direct manner to display or change the value.

In relation to this, implement the procedure below.

1.  **SET** | Press the SET key: the set setpoint value will appear on the display;
2.  | Press the UP and DOWN key within 15 seconds to set the temperature values (within the **r1** and **r2** limits pre-set by the Manufacturer);
3.  **SET** | Press the SET key or do not operate for 15 seconds to set the selected value: the cold room temperature value will appear on the display.

2.1.5.2 Manual activation of the defrost

Make sure the keyboard is not locked:

  | press the defrost key for 2 seconds.

NOTE: manual defrosting is activated on condition that the evaporator is lower than parameter d2.

2.1.5.3 Turning on / off the cold room light

 | press the cold room light key

2.1.5.4 Silencing of the buzzer

Touch any key on the display to silence the buzzer.

2.1.6 Level 2 parameter variation procedure for installers

Access to this level is recommended for installers only and is allowed by entering:

Password: -19

Table 8 shows all the machine configuration parameters.

To modify these parameters, adopt the following procedure:

1.  **SET** | Press the SET key for 4 seconds: the writing “PA” will appear on the display;
2.  **SET** | Press the SET key;
3.  | Press the UP key or the DOWN key within 15 seconds to set the password value (default “-19”);
4.  **SET** | Press the SET key (or do not operate for 15 seconds): the writing “SP” will appear on the display;
5.  | Press the UP key or the DOWN key to select a parameter;
6.  **SET** | Press the SET key;
7.  | Press the UP key or the DOWN key within 15 seconds to set the value;
8.  **SET** | Press the SET key;
9.  **SET** | Press the SET key for 4 seconds to exit the procedure.

Table 8: Configuration parameters

Cod.	Description	U.M.	Range	Factory settings	
				Mbp (+5/-5)	Lbp (-15/-25)
	Level 1 parameter access password			-19	-19
General parameters					
sp	Minimum and maximum cold room temperature setting	°C/°F	Mbp = -5...+5 Lbp = -15...-25	0.0	-18
Probes parameters					
CA1	Cold room temperature probe offset	°C/°F	-25...25	0.0	0.0
CA2	Evaporator temperature probe offset	°C/°F	-25...25	0.0	0.0
P0	Probe type	-	0 = PTC 1 = NTC	1	1
P1	Enable °C decimal point	-	0 = no 1 = yes	1	1
P2	Temperature unit of measure	-	0 = no 1 = yes	0	0
P3	Evaporator probe function	-	0 = disabled 1 = defrost + fans 2 = fans	1	1
r0	Setpoint tolerance range	°C/°F	1...15	2.0	2.0
r1	Minimum setpoint	°C/°F	-99...r2	-5	-25
r2	Maximum setpoint	°C/°F	r1...199	5	-15
r3	Enable setpoint lock	-	0 = no 1 = yes	0	0

Cod.	Description	U.M.	Range	Factory settings	
				Mbp (+5/-5)	Lbp (-15/-25)
Compressor parameters					
c0	Compressor on delay after power-on	min.	0...240	0	0
c1	Delay between two compressors start	min.	0...240	5	5
c2	Compressor off minimum time	min.	0...240	3	3
c4	Compressor off time during cold room probe alarm	min.	0...240	10	10
c5	Compressor on time during cold room probe alarm	min.	0...240	10	10

Cod.	Description	U.M.	Range	Factory settings	
				Mbp (+5/-5)	Lbp (-15/-25)
Defrost parameters					
d0	Automatic defrost interval	hours	0...99 0 = only manual if d8 = 3 max. range	4	3
d1	Defrost type	-	0 = electric (split) 1 = hot gas (Monoblock)	0	0
d2	Threshold for defrost end	°C/°F	-99...99	10	20
d3	Defrost duration	min.	0...99 if p3 = 1 max. duration	30	30
d6	Value displayed during defrost	-	0 = regulation temp. 1 = locked display 2 = label dEF	1	1
d7	Dripping time	min.	0...15	2	2
d8	Defrost interval counting mode	-	0 = device on hrs 1 = compressor on hrs 2 = evaporator temp. < d9 hrs	0	0
d15	Compressor on consecutive time for hot gas defrost	min.	0...99	0	0
d16	Dripping time during hot gas defrost	min.	0...99	0	0
d26	Defrost interval in evaporator probe alarm	-	0...99 hours 0 = only manual	6	6
Temperature alarms					
A0	Select value for high /low temperature alarms	-	0 = regulation temp. 1 = evaporator temp.	0	0

Cod.	Description	U.M.	Range	Factory settings	
				Mbp (+5/-5)	Lbp (-15/-25)
A1	Threshold for low temperature alarm	°C/°F	-99...99	0.0	0.0
A2	Low temperature alarm type	-	0 = disabled 1 = relative to setpoint 2 = absolute	0	0
A4	Threshold for high temperature alarm	°C/°F	-99...99	0.0	0.0
A5	High temperature alarm type	-	0 = disabled 1 = relative to setpoint 2 = absolute	0	0
A6	High temperature alarm delay after power-on	min.	0...240	120	120
A7	High / low temperature alarms delay	min.	0...240	15	15
A8	High temperature alarm delay after defrost	min.	0...240	15	15
A9	High temperature alarm delay after door closing	min.	0...240	15	10
A11	High / low temperature alarms reset differential	°C/°F	1...15	2.0	2.0

Cod.	Description	U.M.	Range	Factory Settings	
				Mbp (+5/-5)	Lbp (-15/-25)
Fans					
F0	Evaporator fan mode during normal operation	-	0 = off 1 = on 2 = on if compressor on 3 = thermoregulated with temperature regulation + F1 4 = thermoregulated (with temperature regulation + F1) if compressor on 6 = thermoregulated (with F1) 7 = thermoregulated (with F1) if compressor on	7	7
F1	Threshold for evaporator fan operation	°C/°F	-99...99	8	5
F2	Evaporator fan mode during defrost and dripping	-	0 = off 1 = on 2 = function to F0	0	0
F3	Evaporator fan off maximum time	min.	0..15	2	2
F8	Evaporator fan regulation threshold differential	°C/°F	1...15	2.0	2.0
F9	Evaporator fan off delay after compressor off	-	0...240 if F0 = 2	10	10

Cod.	Description	U.M.	Range	Factory Settings	
				Mbp (+5/-5)	Lbp (-15/-25)
F10	Condenser fans mode 0 and 1 on in hot gas defrost	-	0 = thermoregulated (with F11) 1 = thermoregulated (with F11) if compressor off, on if compressor on 2 = thermoregulated (with F11) if compressor off, on if compressor on, off in defrost, pre-dripping and dripping	2	2
F11	Threshold for condenser on	-	0...99 °C/°F differential = 2 °C / 4°F	15.0	15.0
F12	Evaporator fan off delay after compressor off	-	0...240 seconds if P4 ≠ 1	30	30

Cod.	Description	U.M.	Range	Factory settings	
				Mbp (+5/-5)	Lbp (-15/-25)
Accessories parameters					
i0	Door micro-switch input function	-	0 = disabled 1= compressor + evaporator fans off 2 = evaporator fans off 3 = cold room light on 4 = compressor + evaporator fans off, cold room light on 5 = evaporator fans off, cold room light on	4	4
i1	Door micro-switch input activation		0 = with contact closed 1 = with contact open	1	1
i2	Open door alarm delay	min.	-1 ... 120 -1 = disabled	10	10
i3	Regulation inhibition maximum time door open	min.	-1 ... 120 -1 = until the closing	15	15
i7	Multi-purpose input alarm delay	min.	0 ... 120 if i5 = 3 or 7 compressor on delay after alarm reset	0	0
i8	Number of activations of multi-purpose input for high-pressure alarm	-	0 ... 15 if 0 = disabled if i5 = 3	0	0
i9	Counter reset time for high-pressure alarm	min.	1 ... 999	240	240

2.2 Alarm signals

In case of alarms, the board normally activates the following actions:

1. the relative alarm code is signalled on the display; in particular, the display control alternates the alarm code and the temperature normally displayed;
2. the audible alarm is activated.

By pressing any key, the audible alarm deactivates, while the display alarm code and the cold room temperature continue to be displayed. The alarm code disappears only when the cause that generated it is found. The table below reports in detail the description of each alarm and the actions undertaken in this respect:

ALARMS

COD.	DESCRIPTION	RESET MODE	SOLUTIONS
Pr1	cold room probe alarm	automatic	check P0
Pr2	evaporator probe alarm	automatic	check the probe integrity
Pr3	auxiliary probe alarm	automatic	check the electrical connection
rtc	clock alarm	manual	set date, time and day of the week
AL	low temperature alarm	automatic	check A0, A1 and A2
AH	high temperature alarm	automatic	check A4 and A5
id	door open alarm	automatic	check i0 and i1
PF	power failure alarm	manual	- press a key - check the electrical connection
COH	high condensation signal	automatic	check C6
CSd	high condensation alarm	manual	- turn the device off and on again - check C7
iA	multi-function input alarm (high pressure, low pressure)	automatic	check i5 and i6
iSd	high pressure alarm	manual	- turn the device off and on again - check i5, i6, i8, i9
LP	low pressure alarm	automatic	check i5 and i6
C1t	compressor thermal protection alarm	automatic	check i5 and i6
C2t	compressor 2 thermal protection alarm	automatic	check i5 and i6
dFd	defrosting timeout alarm	manual	- press a key - check d2 and d3
- - -	user interface-control module communication alarm	manual	check the electrical connection

3 Optional use: EPoCA Wi-Fi module

3.1 Its functions

Thanks to the Wi-Fi module, it is possible to view the status of the units associated with your account, provided that they are turned on and the internet connection is working.

It will in fact be made possible by app or by web to view:

- An overview of the main data detected by the unit allowing to modify some settings without going physically to the machine (provided that the user can only carry out operations to the extent permitted by the access level assigned to him/her)
- The status and the specification of any alarm and the possibility of being notified by email
- All the parameters set in the machine with the possibility of being able to modify them only if allowed to access that level
- The history, selecting both the time and the value range to view; this history can be exported in an Excel, CSV, Pdf file.

3.1.1 Parameter variation procedure

Similarly to paragraph 5.14, access is allowed at two levels: Level 1 for end users and Level 2 for installers.

3.1.2 Level 1 parameter variation procedure for end users

Thanks to the installation of this Wi-Fi module, the machine will allow to have additional settings, including the ability to set the date and time.

3.1.2.1 Set date and time (only on models equipped with Wi-Fi control module)

If the device communicates with the APP EVconnect, the date, time and day of the week will be set automatically from the smartphone or tablet.

Instead, proceed as follows:

1. Unlock the keyboard;
2.  press the DOWN key for 1 second;
3.  press the UP key or the DOWN key within 15 seconds to select the writing “rtc”;
4.  press the SET key: the writing “y” will appear on the display followed by the last two numbers of the year;
5.  press the UP key or the DOWN key within 15 seconds;
6. Repeat steps 3 and 4 for subsequent views:

LAB.	MEANING OF THE NUMBERS FOLLOWING THE LABEL
n	month (01... 12)
d	day (01... 31)
h	time (00... 23)
n	minute (00... 59)

7. |  **SET** | press the SET key: the day of the week will appear on the display;
8. |  | press the UP key or the DOWN key within 15 seconds to set the day of the week;

LAB.	MEANING
Mon	Monday
Tue	Tuesday
Wed	Wednesday
Thu	Thursday
Fri	Friday
Sat	Saturday
Sun	Sunday

9. |  **SET** | press the SET key: the device will exit the procedure;
10. |  | press the ON/STANDBY key to exit the procedure early.

3.1.3 Level 2 parameter variation procedure for installers

Furthermore, thanks to the Wi-Fi module, it is possible to view parameters which cannot be accessed without the module. In addition to all the parameters that can be changed and that have already been shown in Table 8, Table 9 also shows the supplementary machine configuration parameters.

Tabel 9: Configuration parameters with module

Cod.	Description	U.M.	Range	Factory settings	
				Mbp (+5/-5)	Lbp (- 15/-25)
Temperature alarm regulation					
A10	Power failure duration for alarm recording	min	0...240	10	10
A12	Type of power failure alarm signal	-	0 = LED HACCP 1 = LED HACCP + view of PF + buzzer 2 = LED HACCP + view of PF + buzzer (if duration > A10)	0	0
Clock regulation					
Hr0	Enable or disable the clock function	-	0 = no 1 = yes	1	0

1 Set up and use of EPoCA START

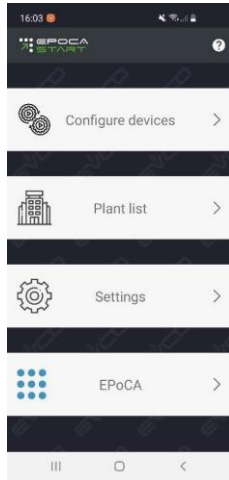
1.1 Leading installation activities:

Download on your smartphone the “EPoCA Start” app.
Take note of the local Wi-Fi name and password.

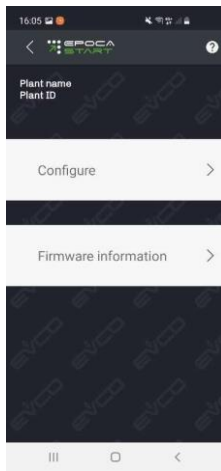
1.2 Installation:

Once the plant is switched on, the powered egg emits a temporary Wi-Fi lasting 120 seconds.

1.2.1 Open the EPoCA app and click on Configure devices:



1.2.2 Open the app and select Configure



1.2.3 Search for the temporary Wi-Fi

(it is recognizable because its name is Epoca followed by an alphanumeric code, for example Epoca123ab; in any case, the app shows only the compatible Wi-Fi) and connect

1.2.4 The homepage of the plant opens

Plant Name: the name of the plant (for example IPAM401A)

Password (enter the password)

Plant category: leave blank

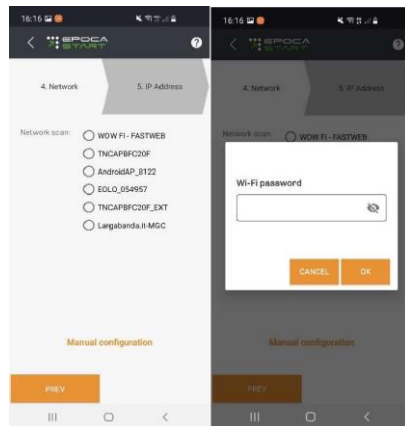
1.2.5

Device name (for example Meatcoldroom1, you name the single device)

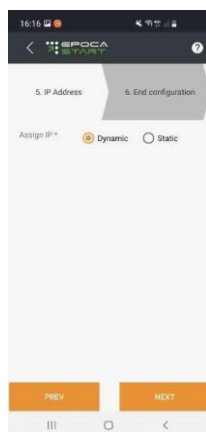
Serial code: leave blank

1.2.6 **Date and Time** set the time zone **Daylight saving time “EU”**

1.2.7 In the Network section, select the local Wi-Fi and enter its password

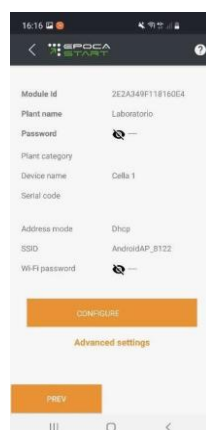


1.2.8 Assign IP: Dynamic or Static



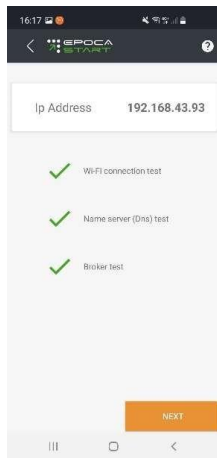
1.2.9 Summary of the data entered...

Select **Configure** to confirm all the data entered



1.2.10 The app checks and confirms the correct installation showing 3 green ticks

EVLINKING IS CONFIGURED



1.2.11 If it must be created, select Create a new account in EPoCA

Enter a username, a password, a password confirmation and the email address associated to the username



then click on **Register**

Lastly, select **associate plant to my account in EPoCA** to associate your account to the created plant

On the next page, confirm by clicking on **Associate**

The plant is associated to the plant! Switch to the browser: **<https://epoca.cloud>**

1.2.1 If it must be created, select **Create a new account in EPoCA**

Enter a username, a password, a password confirmation and the email address associated to the username

A screenshot of a mobile application interface for creating a new account. The screen has a dark header with the EPoCA logo and a 'START' button. Below the header, the text 'Create a new account in EPoCA' is displayed. The form contains four input fields: 'Username', 'Password', 'Repeat password', and 'Email'. Each password field has a small eye icon for toggling visibility. At the bottom of the form is an orange 'REGISTER' button. The mobile status bar at the top shows the time as 16:17 and various icons.

then click on **Register**

Lastly, select **associate plant to my account in EPoCA** to associate your account to the created plant

On the next page, confirm by clicking on **Associate**

The plant is associated to the plant! Switch to the browser: **<https://epoca.cloud>**