EMKA

Classphere® 3H

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EMKA

Content

⚠ *Important Safety Instructions:*

It is the installer's responsibility to carry out a full safety and function assessment of the appliance.
To reduce the risk of fire, electric shock or injury, read all the safety instructions and warning before using the unit.

- This unit is only designed for ventilation air in homes and commercial buildings.
- It must not be used to extract combustible or flammable gases.
- Remove the power plug before commencing any service and maintenance work.
- Before opening the door, switch off or unplug the unit.
- The door is heavy. Be careful when removing it.
- Once the door is removed, wait 5 minutes for the heating element to cool down to touch the unit safely.
- If the power lead is damaged, it must be replaced by the manufacturer in order to avoid a hazard. The manufacturer's service agent or a similarly qualified person.
- The unit contains heating elements that must not be touched when they are hot.
- The unit must not be operated without the filters being in place.
- The instructions in the user manual must be followed for complaints to be accepted.
- Children shall not play with the appliance, could be injured.
- Children of less than 3 years should be kept away unless continuously supervised.
- When the door is removed, keep it away from children.
- Some parts of this product can become very hot and cause burns. Particular attention has to be given where children and vulnerable people are present.
- Children of less than 8 years shall only switch on/off the appliance provided that it has been placed or installed in its intended normal operating position and they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children of less than 8 years shall not plug in, regulate and clean the appliance or perform user maintenance.
- Users are advised not to use the maximum flow for long periods of time, as the useful life of the unit may be impaired maintaining the constant flow recommended by the installer.
  Note that the product is not intended for use by children.

> **! Important Safety Instructions:**

To maintain a good indoor climate, comply with regulations and avoid condensation damage, the unit must never be stopped apart from during service/maintenance or in connection with an accident.

If you need more information, help from technical support or original instructions in another language you can visit us on the website: **www.emkamf.es**

Our products are subject to continuous development and we therefore reserve the right to make changes. We also disclaim liability for any printing errors that may occur.
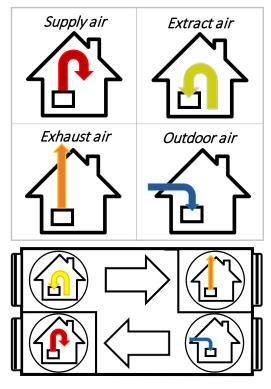
1. Symbols used

These products have a number of symbols that are used to label the product itself and in the installation and user documentation.

Supply air

Extract air

Exhaust air

Outdoor air

EXAMPLE OF NIPLE LOCATION
(shown as a left-sided model)

DANGER! ELECTRICITY

DANGER! DO NOT TOUCH

WARNING

When a text bears this symbol, it means that personal injury or serious damage to the equipment may result if the instructions are not followed.

CAUTION

When a text bears this symbol, damage to equipment or poor efficiency may be the consequence of not following the instructions.

1. 1. Manufacturer Description

We are a company committed to the quality of our products and in all production processes in accordance with the **ISO 9001: 2015** standard that certifies us.

We are also committed to the research and development of efficient products for the environment.

Our products are manufactured according to the recognized technical safety rules and in accordance with the european conformity directives (**CE**).

Each product we manufacture is subjected to a final test that ensures compliance with quality requirements and production efficiency.

Sistema de Gestión
ISO 9001:2015
www.tuv.com
ID 9108643584

Conformité Européenne
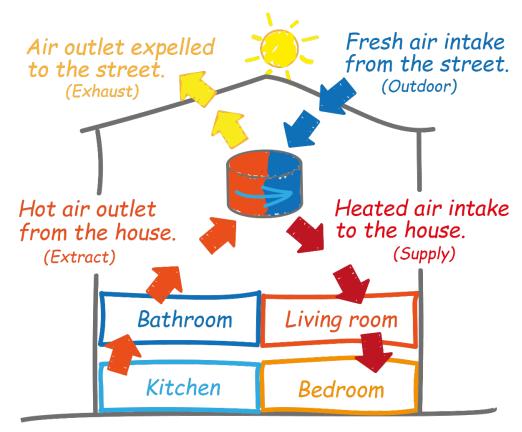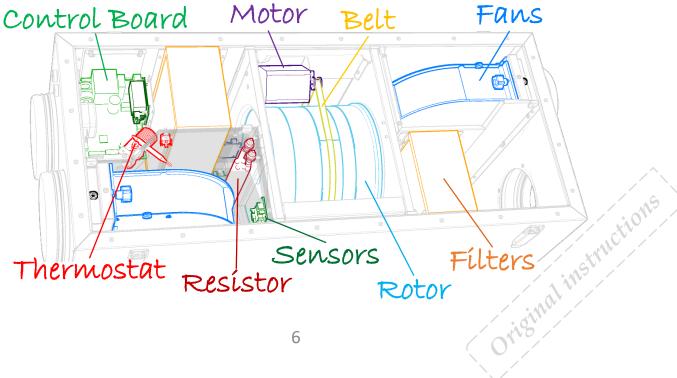
2.   Description

A heat recovery unit is essentially, a ventilation system that renews the air in the house exchanging the heat of the air that comes out of it, to heat the fresh air that enters the street.

The LYNX heat recovery units, have an intelligent software that measures and adjusts the flow and temperature of the air, the CO_2 level and the relative humidity in the environment, all this added to the rotor offers users an automatic ventilation system that controls thermal efficiency and the air quality.

2. 1.   Main components
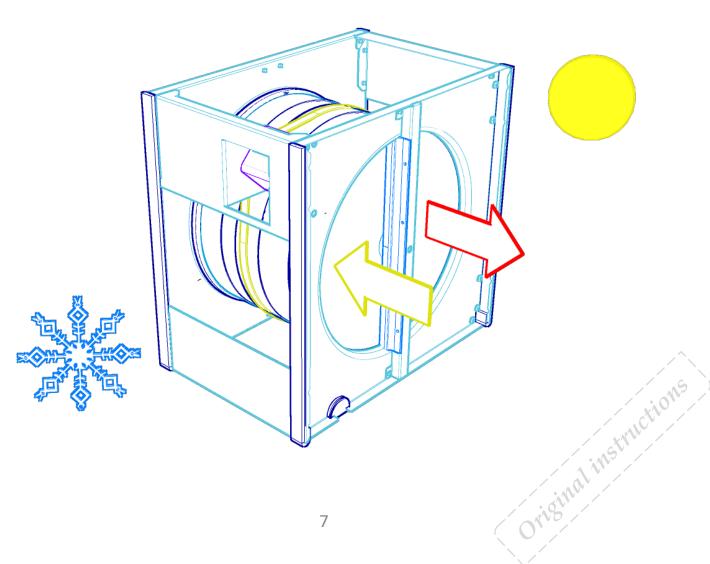
2. 2.   Explanation of how the exchanger works

The air flows through the rotating wheel-type heat exchanger (recovery) called exchanger (HR). It is designed to store and redistribute heat.

Winter operation: For extracting the hot air from the house (Extract), the exchanger absorbs the heat from the air that we expel from the interior (Exhaust), conducting the heat energy accumulated in the exchanger towards the cold air that enters from the outside (Exterior), so that the heat accumulated in the exchanger is absorbed by the external air (Supply), returning the heat energy to the interior of the house.

Summer operation : In the hot summer season, exactly the same process occurs, but in reverse, that is, when extracting the fresh air from the house (Extract), the exchanger absorbs the thermal energy of the air that we expel from the interior (Exhaust), conducting the thermal energy accumulated in the exchanger towards the hot air that enters from the exterior (Outdoor) so that the thermal energy accumulated in the exchanger is absorbed by the hot air from outside (Supply), returning the outside air to a lower temperature inside the house.

3. Description of the ventilation system

3. 1. Fans

The fans ensure that air enters and leaves the building. They are automatically adjusted for an optimal ventilation rate. The unit can be regulated in different modes from the control panel. See chapter 5.1 for more information

> ⓘ **WARNING**
>
> *Adjustment must always be carried out by qualified staff before the installation is used for the first time.*

3. 2. Filters

Filters with a high filter grade (F7) are used as a standard for both supply and extract air so it enters clean inside the building. The filters also ensure that the unit stays clean and maintain thermal efficiency and airflow.

3. 3. Rotor

The air flows through the rotating wheel-type heat exchanger (recovery) called Rotor (HR). It is designed to store and redistribute heat. The warmth from the extract air is accumulated in one side, then it heats the supply air and recover that energy when the warm side of the rotor moves over to the supply air-take.

3. 4. Resistor

If the recovered energy is insufficient to maintain the set supply air warmth, an electric heating element will help raise the temperature . The heating element (Tt) is protected against overheating by the thermostat (J12) which cuts out automatically at a high temperature. If it happens, it has to be reset manually by pressing the reset button to resume functioning (See Installation and maintenance manual). For extra safety, a bimetallic thermostat has been installed (J11).

If the alarm is tripped repeatedly, please contact the service company or distributor. See chapter 9.4 for more information.

3. 5. Sensors
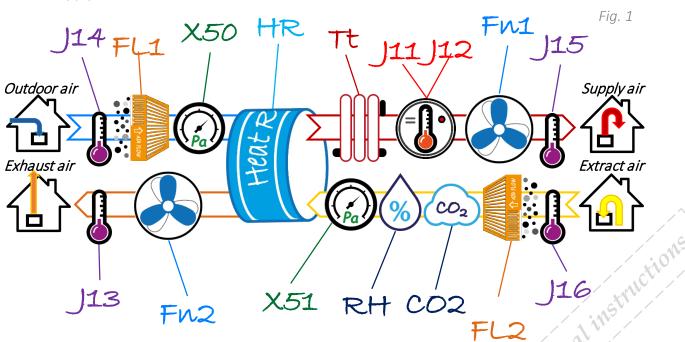
The unit has seven sensors:

Four sensors measure the temperature in all four air-channels (See Fig. 1, J13 - J16).

Two sensors measure the airflow and pressure. (See fig. 1, X50, X51).

The last sensor measures the humidity and the CO_2 levels.

All combined control the air quality and efficiency. See Installation and maintenance manual to more information.

Fig. 1
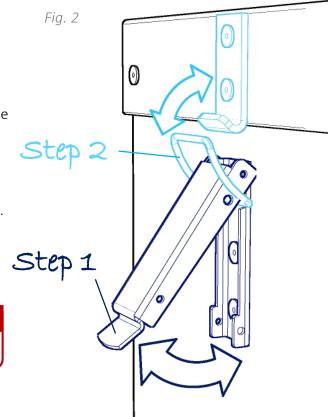
4. Door use

The door is an essential element which keeps the device hermetic and insulates the sound from inside.
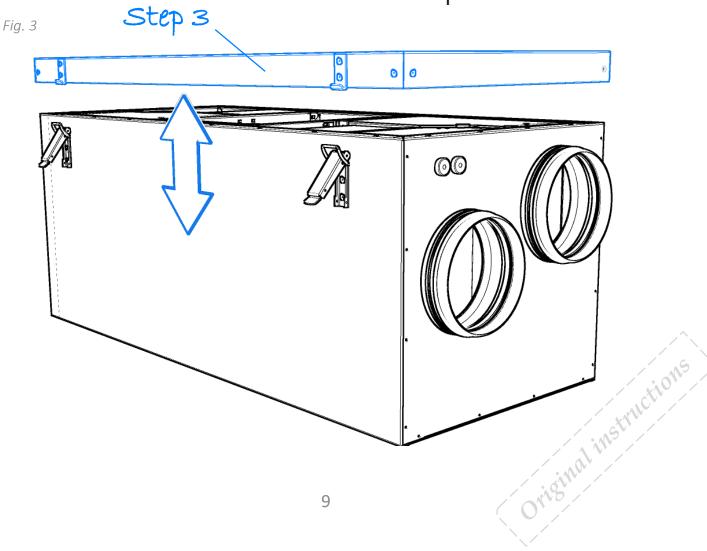
To open the door, it is only necessary to unhook all four latches of is position and remove the door. (see Fig. 2 and 3)

To close the door, all borders shall fit together correctly, once done, hook all four latches in position and then lower them for complete sealing.

Fig. 2

Step 2

Step 1

> ⚠️ **WARNING**
>
> *The door is heavy. Be careful when removing it*

Step 3

Fig. 3

Original instructions
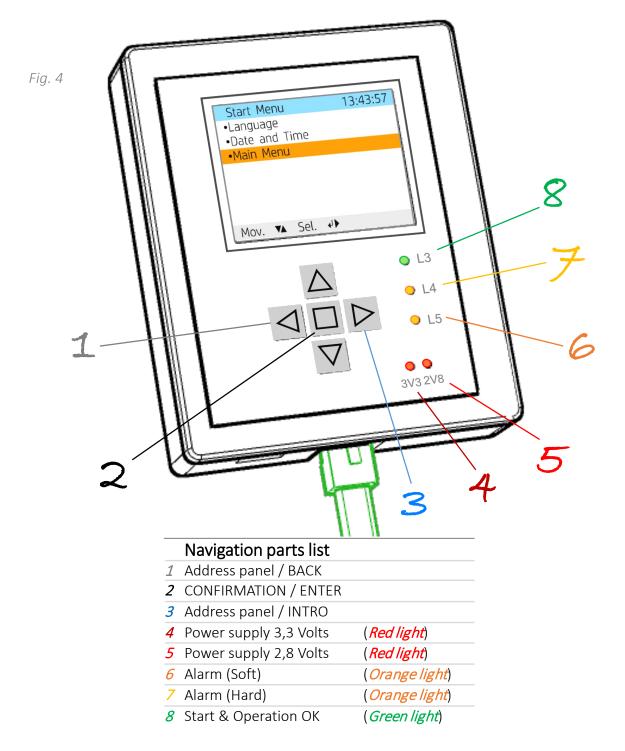
5.   Overview MK control panel

Fig. 4

	Navigation parts list	
1	Address panel / BACK	
2	CONFIRMATION / ENTER	
3	Address panel / INTRO	
4	Power supply 3,3 Volts	(*Red light*)
5	Power supply 2,8 Volts	(*Red light*)
6	Alarm (Soft)	(*Orange light*)
7	Alarm (Hard)	(*Orange light*)
8	Start & Operation OK	(*Green light*)

5. 1.   Description
The control unit consists of a coloured display, pressure switches and indicators (LEDs). The address panel is a membrane keyboard used for adjusting all different functions from the ventilation unit. The control communicates with the ventilation unit through a low-voltage cable.

6. Overview of software

	Screen indicators list	
1	Menu name and position	(*Blue highlight*)
2	Navigation selector	(*Orange highlight*)
3	Navigation options	(*Grey highlight*)
4	Time	

6.1. Description

The software that manages the operation of the unit automatically. This receives reading data from sensors constantly. This means that the software measures at every moment the temperature of the four channels of the unit, the level of CO_2, relative humidity of the house or premises and the difference in pressure at the entrance and exit of the air during all the day. Depending on the readings it receives from the sensors, it corrects the flow of the fans, the speed of the rotor and the temperature of the electric resistance. Thanks to software, we are able to control at all times the quality of the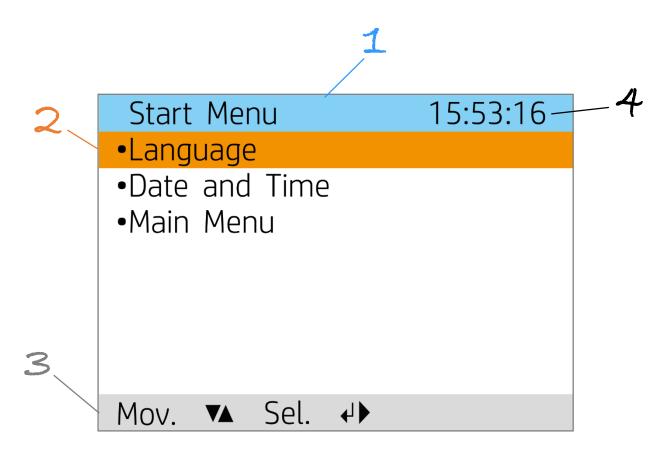 air that is breathed in the environment and the thermal efficiency of the rotor, which allows us to considerably reduce heating costs with very low electrical consumption.

In addition allows you to change your configuration to the needs of each user without losing intelligent control.

6. 2. Control panel navigation
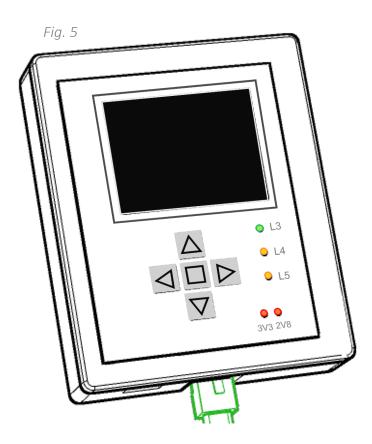
The address panel is used to navigate through the menu lines. The cursor is illustrated by an orange highlight. To make a selection on the current menu, place the orange line on the chosen option then press button INTRO or RIGHT to confirm.

If you select a function that has numerical values, the current value is displayed with two directions icon (UP and DOWN). the value is changed with buttons UP and DOWN and then confirmed by pressing button INTRO.

The cursor can be moved to the right and left, until all settings have been changed.
Once finished, confirm to exit the menu.
If you want to cancel a function or return to the previous menu screen, use button BACK or LEFT.

6. 3. Standby mode

The panel will go into Standby if it is not used for a while. The display will be off but it will light up again if any of the Buttons is pressed.

Fig. 5

7. Start Menu

When the system is started, the first menu is opened, "*Start Menu*".

In this menu there are three options:

▪ **Language**, starts by default in English.

▪ **Date and Time**, it will only be necessary to configure it the first time you start the unit.

▪ **Main Menu**, once you access this menu, does not allow you to go back. But the date and time can be modified in the main menu.

8. Main Menu

This menu is used to control the status and operation of the unit.

Main Menu	17:53:16
•Measurements	
•Settings	
•Date and Time	
•Language	
•System Info	
•Advanced user	
Mov. ▼▲ Sel. ↵▶	

8. 1. Measurements

Displays current temperature values, CO2 levels, relative humidity, airflow and filter status.

Measurements	13:59:46
CO2 Level Ppm:	373
Rel. Humidity %:	54
Extract Temp. ℃:	14.0
Outdoor Temp. ℃:	7.7
Supply Temp. ℃:	12.4
Exhaust Temp. ℃:	10.5
Supply Airflow m3:	96
Exhau. Airflow m3:	96
Next ▲▼ Back ↵◀	

Measurements	13:59:57
Supply Fan Rpm:	1540
Exhaust Fan Rpm:	1536
Supply Filter %:	100
Exhau. Filter %:	100
Next ▲▼ Back ↵◀	

8. 2. Settings

It allows configuring the unit's operation in the following modes:

Settings	16:29:59
•Boost Fan Level	
•Boost Fan Timer	
•Night Cool	
•Night Cool Point	
•Silent Mode	
•Silent Timer	
•Home Away Mode	
Mov. ▲▼ Sel. ↵▶ Back ◀	

▪ **Boost Fan Level**, used to increase the airflow of the unit.

Param Setting	13:21:54
	▲
Boost Fan Level :	Medium
	▼
Next ↵ – Back ◀	

This function allows you to choose between three levels of airflow.

Minimum	It must not be used when the house is occupied or during the first two years after a new house is built.
Medium	Used under normal conditions. On this settings the air supply must be adjusted according to standard regulations.
Maximum	Used if there is a need for increased air supply on account of higher occupancy or a raised humidity level, such as shower or bath times, or when clothes are being dried. This setting is normally used for limited periods.
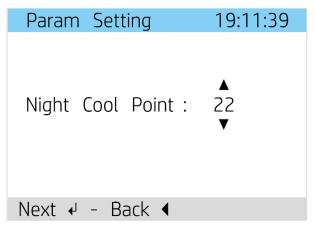
- **Boost Fan Timer**, the boost fan timer manages the time period that activates the Boost Fan Level with a limited period of 120 minutes maximmum. Once the time is due,it will return back to its originally set airflow. This function is ideal during showering, for example, when there is a greater need for extraction for limited periods. When the function is active, the countdown is on display.

Param Setting	18:29:53
Boost Fan Timer : 10 ▲ ▼	
Next ↵ – Back ◀	

- **Night Cool**, the night cool is a function that allows to cool down the inside when the temperature outside is colder during night time. This options is used during warmer seasons, at night, when there is a chance to cool down the house.
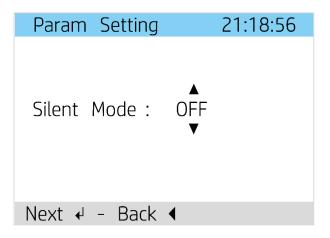
Param Setting	19:48:27
Night Cool : OFF ▲ ▼	
Next ↵ – Back ◀	

- **Night Cool Point**, this feature is used to define the temperature desired by the user. It can be set from 16℃ to 26℃ which will regulate the incoming air temperature.

Param Setting	19:11:39
Night Cool Point : ▲ 22 ▼	
Next ↵ – Back ◀	

Once you set the preferred temperature, the night cool will be on until the temperature is lower than what has been set, or the outdoor temperature is higher than the indoors, this way it is automated throughout the entire warm season.

- **Silent Mode**, the silent mode is used to reduce ventilation noise, putting fans at minimum power. When this option is activated the unit reduces the speed of the fans to a minimum. This function is only disabled manually or by programming the silent timer.

Param Setting	21:18:56
Silent Mode : ▲ OFF ▼	
Next ↵ – Back ◀	
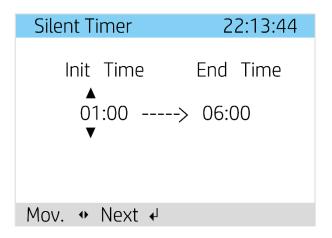
This function is usually used during the night, so that ventilation does not disturb users when they sleep.

- **Silent Timer**, this feature is used to program the duration time of silent mode.

```
Silent Timer            22:13:44

   Init  Time       End  Time
        ▲
    01:00  ----> 06:00
        ▼


Mov.  ◆  Next ↵
```

- **Home Away Mode**, on this function the unit turns off, and every 24 hours it turns on for 15 minutes to move the rotor and change the air. The home away mode does not have automatic exit, because it is usually used for long absences, for example, when users go on vacation to another country for a long period, and they need to renew the air to avoid humidity problems in the house.

```
Param  Setting         21:55:16


                          ▲
   Home  Away  Mode  :   OFF
                          ▼



Next ↵ - Back ◆
```

8. 3.   Date and Time

This function is also implemented in this menu, because the software does not do the seasonal time change automatically.
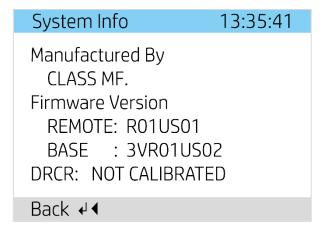
8. 4.   Language

This option is also implemented in this menu, because it is not possible to return to the start menu from the main menu, in case the user needs to change the language .

```
Language               16:05:32
•English
•Español
•Deutsche



Mov.  ▲▼   Sel.  ↵▶    Back ◆
```

8. 5.   System Info

This option contains the information about the version of the software that has the unit installed.

```
System Info            13:35:41

Manufactured By
   CLASS MF.
Firmware Version
   REMOTE:  R01US01
   BASE    :  3VR01US02
DRCR:  NOT CALIBRATED
Back ↵◆
```

The date and time that this option shows refer to the last software update made.

9. Advanced User Menu

This menu is used for advanced settings and trouble diagnosis.
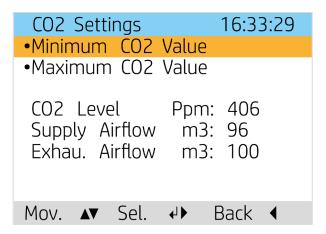
```
Advanced user          16:05:32
•CO2 Settings
•Calibration Test
•Ventilation
•Alarms
•Calibration information


Mov.   ▲▼   Sel.  ↵▶     Back ◀
```

9. 1. CO2 Settings

This function is used to adjust the minimum and maximum values of CO2. Once configured, the unit will automatically manage the CO2 levels.

```
CO2  Settings          16:33:29
•Minimum  CO2  Value
•Maximum  CO2  Value

CO2  Level      Ppm:  406
Supply  Airflow   m3:  96
Exhau.  Airflow   m3:  100


Mov.   ▲▼   Sel.  ↵▶     Back ◀
```

In addition, the menu shows the current measurements of CO2 and air flow. **It comes with a default range from 600-1000 ppm. Because it is the optimum range of air quality.**

9. 2. Calibration Test

This function is the process to optimize the unit to the characteristics of the house. When the calibration test is performed, the unit detects the status of the filters to optimize the airflow to the user's needs.

This process is done automatically every 15 days. This way we ensure the correct operation of the unit.

```
Calibration Test        16:54:11
Warning:  You  are  about  to
   do  a  calibration
   procedure.  Previous
   calibration  data  will  be
   overwritten.  Calibration
   will  take  some  minutes.
        Please  wait. . .
Confirm  ↵  Cancel  ◀
```
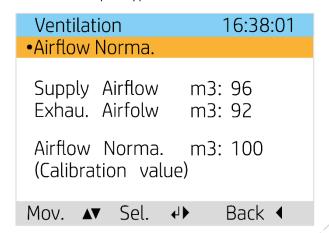
The calibration test must be done before it is used for the first time and after every filter change.

> ⚠ **_CAUTION_**
>
> _The calibration test should be done by qualified staff. For more information, see the Installation Manual (Page 17)_

9. 3. Ventilation

In this function, you can regulate the airflow to a desired level. The ventilation regulates the fan speed from 10m3/h to its maximun (depending on the devices capacity).

```
Ventilation            16:38:01
•Airflow Norma.

Supply  Airflow    m3:  96
Exhau.  Airfolw    m3:  92

Airflow  Norma.   m3:  100
(Calibration  value)


Mov.   ▲▼   Sel.  ↵▶     Back ◀
```

In "_Airflow Norma._" We set the airflow to which the unit adjusts automatically.

Even though the settings go from 10 to 500 the máximum level will be adapted to de device features.

```
┌─────────────────────────────────────┐
│ Param Settings          19:06:52     │
│                                      │
│                            ▲         │
│  Airflow  Norma.    :    100         │
│                            ▼         │
│                                      │
│ Next ↵ - Back ◄                      │
└─────────────────────────────────────┘
```

9. 4.   Alarms

This function is used for diagnosing and repairing problems with the unit. It is usually used when the filters are dirty. The unit detects that the filter needs to be changed, turning on the filter alarm to be replaced.

```
┌─────────────────────────────────────┐
│ Alarms                  18:19:51     │
│ •Outdoor  Filter    :  OFF           │
│ •Return  Filter     :  OFF           │
│ •CO2  Sensor        :  OFF           │
│ •Humidity  Sensor : OFF              │
│ •Return  Temp       :  OFF           │
│ •Outdoor  Temp      :  OFF           │
│ •Supply  Temp       :  OFF           │
│ •Exhaust  Temp      :  OFF           │
│ Mov. ▲▼ - Sel. ↵▶ - Back ◄           │
└─────────────────────────────────────┘
```

When an error occurs in the unit, the indicators L4 and L5 will illuminate on the control panel and the display will indicate that an alarm has been activated with a warning symbol and a buzzer.

The signal given by the indicators L4 and L5 depends on the issue detected.

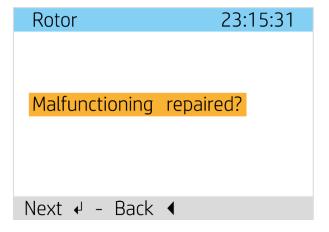When the signal is given, the LED blinks for 5 seconds, and then stays on.

The indications are divided in two types:

*Soft (***L4 Light on***)*, It means there is a problem going on that doesn't require the unit to stop.

*Hard (***L4 and L5 Lights on***)*, It means there is a problem that requires to be solved .

```
┌─────────────────────────────────────┐
│ Alarms                  18:19:51     │
│ •Sup.  Fan  Press : OFF              │
│ •Exh.  Fan  Press : OFF              │
│ •Rotor              : ON             │
│ •PostHeater         : OFF            │
│ •PreHeater          : OFF            │
│ •Calibration        : OFF           │
│ •Supply  Fan        : OFF            │
│ •Extract  Fan       : OFF           │
│ Mov. ▲▼ - Sel. ↵▶ - Back ◄           │
└─────────────────────────────────────┘
```

When an Alarm is activated, the software will allow deactivated it asking if this problem has been fixed.

```
┌─────────────────────────────────────┐
│ Rotor                   23:15:31     │
│                                      │
│                                      │
│  Malfunctioning  repaired?           │
│                                      │
│                                      │
│ Next ↵ - Back ◄                      │
└─────────────────────────────────────┘
```
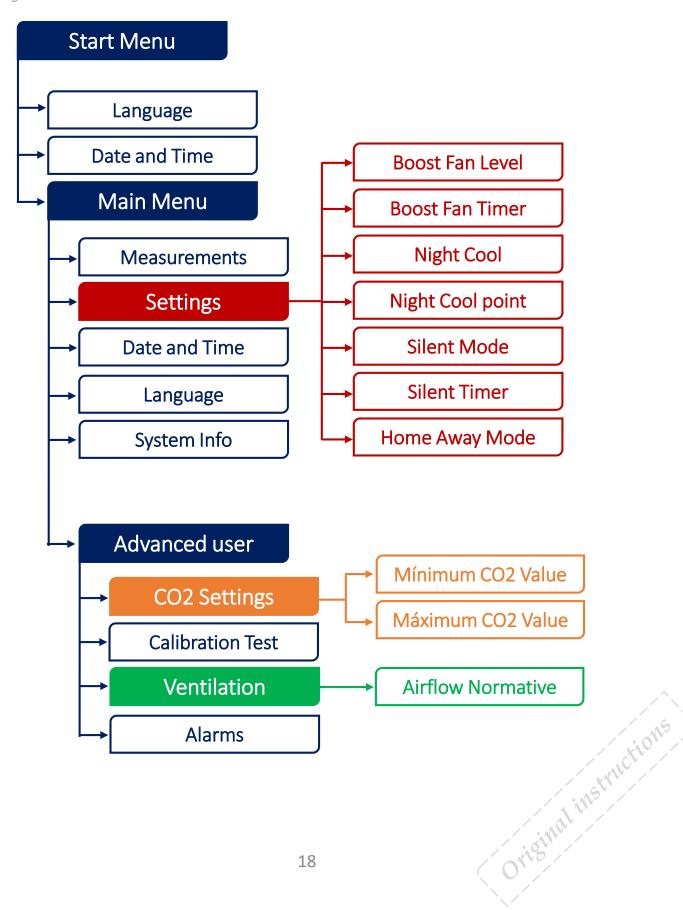
Once the alarm repair has been confirmed, if the issue has not been repaired correctly, the alarm it will be activated again.

9. 5.   Menu Tree

Fig. 6

10. Filter change

> ⚠️ **WARNING**
>
> *It is recommended for the safety of the unit that the filter change is carried by qualified staff.*

The filter change indication will be activated when the filters are at 50% of their shelf life, for which the indicator L4 will turn on to remind you that it is time to replace the air filters.

The usable life of the filter, represented as percentage, can be found in the *"Main Menu"* and access *"Measurements"*. See chapter 8 for more information.

```
Measurements          13:59:57
Supply  Fan    Rpm:  1540
Exhaust  Fan    Rpm:  1536
Supply  Filter     %:  100
Exhau.  Filter     %:  100



Next ▲▼   Back ↵◄
```

It is recommended to change the filters to 50% to ensure optimal air quality.

> ⚠️ **WARNING**
>
> *Before opening the door, switch off or unplug the unit. Once the door is removed, wait 5 minutes for the heating element to cool down to touch the unit safely.*

> ⚠️ **CAUTION**
>
> *Make sure that the filter's outer edge to push it in. A damaged filter reduces the unit's effect and the air purity.*

The filters have a limited shelf life, and to preserve a healthy indoor air quality it is important to change them when they are dirty.
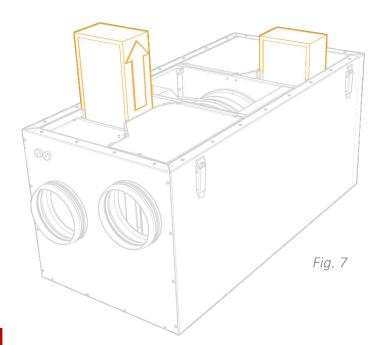
Dirty filters can, among other things, lead to:
- Reduced efficiency of the unit
- The unit becoming dirty
- Humidity damage to the house
- Reduced indoor air quality

To renew the filters:
1. Pull the filter out (see Fig. 7).
2. Put a new filter in.

For more information, see the Installation Manual (Page 19)

Fig. 7

After the filter has been replaced or the cause of the alarm repaired, the alarm must be reset. To do so, go to *"Advanced user menu"* and access *"Alarms"*.

Once the alarm has been reset, it is necessary to calibrate the unit, so that the air quality standards are adjusted to the new filters.
To calibrate the unit, you must go to *"Advanced user menu"*, and access *"Calibration Test"*.
For more information, see the Installation Manual (Page 17)

11. Cleaning and maintenance

Component	Action	Interval
Filter	Filters must be changed at least once a year. It is best to change them twice a year, before and after the pollen season. check that the filter seal is completely tight.	6-12 months
Fans	Fans must be cleaned at least once a year to maintain fan efficiency.	12 months
Rotary wheel-type heat exchanger	Make sure the surfaces are clean. Check the sealing strips are facing towards the rotary wheel-type heat exchanger. check that the rotor belt is intact and not too slack.	12 months
Kitchen hood*	Wash the grease filter. check that the damper is clean and closes fully.	2 weeks
Seals	Check that the seals on the door, under the filters, on the fan modules and on the rotor module are intact.	12 months
Valves	The supply air and extract air valves (for the bathroom, bedroom, laundry room, etc.) must be cleaned at least once a year.	12 months
Air intake	Check that no leaves and other items have caught on the grille. In periods of sea smoke during winter the air intake can freeze up. If necessary it must be scraped clean so that the air can pass through.	12 months
Ducts	Check that the ducts are clean.	10 years
Brush strips	Check the brush strips are intact and sit tightly against the rotor. If they are worn, they must be changed.	3 years
Inside unit	A combination of a very low outside temperature and damp extract air can lead to the formation of ice. Normally this will not be a problem - when normal operating conditions return the ice crystals will be converted to steam and removed from the unit via the exhaust air. In the case of extreme cold over extended periods the unit should be checked for ice.	

*For units with extract air from the kitchen hood connected to the unit.

12. Troubleshooting

Type of alarm	Remedial actions
Outdoor Filter	1. New *Outdoor* filter needed. 2. Perform *Calibration Test*. 3. Deactivate the alarm. 4. If the alarm is activated again, contact your support service.
Return Filter	1. New *Extract* filter needed. 2. Perform *Calibration Test*. 3. Deactivate the alarm. 4. If the alarm is activated again, contact your support service.
CO2 Sensor	1. Restart power to the unit. 2. Deactivate the alarm. 3. If the alarm is activated again, contact your support service.

Type of alarm	Remedial actions
Humidity Sensor	1. Restart power to the unit. 2. Deactivate the alarm. 3. If the alarm is activated again, contact your support service.
Return Temp. *Outdoor Temp.* *Supply Temp.* *Exhaust Temp.*	1. Check that the temperatures are not at 0 °C. See the remote control. 2. Restart power to the unit. 3. Deactivate the alarm. 4. If the alarm is activated again, contact your support service.
Sup. Fan Press.	1. Restart power to the unit. 2. Deactivate the alarm. 3. If the alarm is activated again, contact your support service.
Exh. Fan Press.	1. Restart power to the unit. 2. Deactivate the alarm. 3. If the alarm is activated again, contact your support service.
Rotor	1. Check that the rotor is rotating. 2. Check that the *Outdoor* and *Supply* temperatures are more than 4 degrees apart. See the remote control. 3. Deactivate the alarm. (Use only in Winter, when there is a risk of frostbite) 4. If the alarm is activated again, contact your support service.
PostHeater	1. Check if the safety thermostats have been activated. 2. Deactivate the alarm. 3. If the alarm is activated again, contact your support service.
PreHeater	1. Check if the safety thermostats have been activated. 2. Deactivate the alarm. 3. If the alarm is activated again, contact your support service.
Calibration	1. Check that the remote control is connected correctly. 2. Restart power to the unit. 3. Deactivate the alarm. 4. If the alarm is activated again, contact your support service.
Supply Fan	1. Check that *Supply Airflow* is not at 0 m3/h. See the remote control. 2. Verify that the *Supply Fan* is not at 0 RPM. See the remote control. 3. Deactivate the alarm. 4. If the alarm is activated again, contact your support service.
Exhaust Fan	1. Check that *Exhaust Airflow* is not at 0 m3/h. See the remote control. 2. Verify that the *Exhaust Fan* is not at 0 RPM. See the remote control. 3. Deactivate the alarm. 4. If the alarm is activated again, contact your support service.

CLASS mf

EC Declaration of Conformity

We, the undersigned,

Class Manufacturing S.L.

Address: C/ Urano nº 2 - Polígono Industrial nº 2 La Fuensanta

28936 Móstoles (Madrid)

Country: Spain

Declare under our responsibility that the following product:

Heat Recovery Unit - Classphere 300H

Complies with requirements of following European directives:
Directive 2014/35/EU (Safety Standard)
Directive 2014/30/EU (EMC Standard)
And for this the following standards are met:

Safety Standard IEC 60335-2-30 IEC 60335-2-80	**IEC 60335-2-30:2009 + A1:2016 IEC 60335-2-80:2015** used in conjunction with **IEC 60335-1:2010 + A1:2013 + A2:2016 and** **EN 60335-2-30:2009 + A11:2012 + A1:2020** **EN 60335-2-80:2003 + A1:2004 + A2:2009** used in conjunction with **EN 60335-1:2012 + A11:2014 + A13:2017 + A1:2019 + A14:2019 + A2:2019** **EN 62233:2008**
EMC Standard	**EN 55014-1:2017** **EN 55014-2:2015** **EN 61000-3-2:2018** **EN 61000-3-3:2013+AMD1:2017**

Place and date of issue   **Móstoles August 06, 2020**

Pablo Arroyo Bayona

General Manager

Original instructions

13. Maintenance and revisions

Checks for the technician	
The ducts have been laid in accordance with the installation manual	
The ducts have been correctly connected to the air connectors	
The unit Works properly at all speeds	
The rotor turns freely	
The resistor heats the air	
The unit has both filters fitted	
The unit is properly closed (Hermetic closure)	

14. Predefined levels in the installation

Installation date	Observations
Optimal airflow	
Máximum level of CO2	
Mínimum level of CO2	
Máximum level of humidity relative	
Mínimum level of humidity relative	

15. Register of calibrations

Incident description	Date	Observations

Incident description	Date	Observations

Observations:

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Observations:

The right to give notice of lack of conformity applies to this product in accordance with the existing terms of sale, **provided that the product is correctly used and maintained.** Filters are consumables.

The symbol on the product shows that this product must not be treated as household waste. It must be taken to a reception station for recycling of electrical and electronic equipment.

By ensuring correct disposal of the equipment, you will contribute to preventing negative consequences for the environment and health that incorrect handling may entail. For further information on recycling of this product, please contact your local authority, your refuse collection company or the company from which you purchased it.

Notice of lack of conformity as a result of incorrect or defective installation must be submitted to the installation company responsible. the right to give notice of lack of conformity may lapse if the system is used incorrectly or maintenance is grossly neglected.

EMKA MANUFACTURING, S.L.

C/ Júpiter, 3 - 28936 Móstoles, Madrid - Spain

www.emkamf.es

Series
Classsphere®