Manual Fläktar

H50| H50+S| H40+| CDV-A| MATEX100




2025

CONTENTS

GENERAL INSTRUCTIONS AND SAFE USE

- Comply with all applicable local regulations on handling hazardous substances and with the instructions given in this user manual.
- The enclosure must be installed in accordance with the technical and safety regulations of the premises in which it is installed.
- Technical inspections must be carried out by qualified and approved personnel.
- Spare parts must be original spare parts.
- General damage to safety components should be repaired immediately by a TRIONYX employee.
- The cabinet must be used in accordance with these instructions.
- This equipment is for professional use only. It must never be used by children or by anyone who is not in full possession of their intellectual capacities.
- If the cabinet is used in a manner not specified in this manual, safety may be compromised. be compromised.
- By using trained/authorised personnel, malfunctions and damage that may occur as a result of incorrect use/handling can be ruled out.
- Do not dismantle all or part of the casing except for maintenance purposes. carried out by qualified and approved personnel.
- To avoid an explosive atmosphere and harmful vapours, appropriate technical ventilation is required. strongly recommended.
- In the event of an enclosure fault, the enclosure must no longer be used and must be marked as non-conforming until the enclosure has been repaired by a qualified and approved person.
- The location where the cabinet is installed must ensure that the following conditions of use apply:
  - The cabinet is intended for indoor use only. Under no circumstances should it be used indoors. exterior ;
  - The cabinet must not be exposed directly or indirectly to any source of heat;
  - The H50+, H50+S, H40+ and CDV-A housings are not intended for use in an atmosphere of explosive ;
  - The humidity level must be between 30% and 70%;
  - The ambient temperature where it is located must be around 20°C± 2°C in order to benefit from the optimal qualities of the activated carbon filter;
  - The altitude must be between 0 and 2000m;
  - Pollution degree 2 (indicator of the level of pollution that may be present in the equipment's environment); Installation category II (transient overvoltages) ;

Warning: For all handling, it is advisable to wear personal protective equipment appropriate to the risks involved: masks, goggles, gloves, smocks, etc. Before using this equipment, it is essential that you read the instructions in full.

Warning:

- Do not unplug the equipment until it has been switched off using the O-I on/off switch located on the side of the cabinet.
- The mains plug acts as the main disconnecting device. It is therefore advisable to disconnect the equipment after turning the on/off switch to the "O" position, before carrying out any work on it.
- Before connecting the equipment to the mains, check the condition of the mains power cable and of the wall socket.
- Do not open the casing, as there is a risk of injury from the motor or damage to the equipment.
- This equipment must not be immersed in water, splashed with water or exposed to extreme heat.
- Do not dismantle all or part of the product except for maintenance operations carried out by personnel trained in electrical hazards.
- Only the original detachable mains power cord supplied by the manufacturer should be used, or a detachable mains power cord with the same electrical characteristics as the original cord.
- If the appliance is used in a manner not specified in this manual, safety may be compromised. be compromised.

Before using this appliance, please read these instructions in full.

Symbols that may appear on the device

Numero	Symbole	Référence	Description
1		CEI 60417-5031 (2002-10)	Courant continu
2		CEI 60417-5032 (2002-10)	Courant alternatif
3		CEI 60417-5033 (2002-10)	Courant continu et courant alternatif
4		CEI 60417-5032-1 (2002-10)	Courant alternatif triphase
5		CEI 60417-5017 (2006-08)	BORNE de terre
6		CEI 60417-5019 (2006-08)	BORNE DE TERRE DE PROTECTION
7		CEI 60417-5020 (2002-10)	BORNE de masse chassis
8			Non utilisé
9		CEI 60417-5007 (2009-02)	Marche (alimentation)
10		CEI 60417-5008 (2009-02)	Arrêt (alimentation)
11		CEI 60417-5172 (2003-02)	Appareil entièrement protégé par DOUBLE ISOLATION OU ISOLATION RENFORCÉE
12		ISO 7000-0434B (2004-01)	Attention, possibilité de choc électrique
13		CEI 60417-5041 (2002-10)	Attention, surface chaude
14		ISO 7000-0434B (2004-01)	Attention *
15		CEI 60417-5268 (2002-10)	Position active d'une commande bistable
16		CEI 60417-5269 (2002-10)	Position repos d'une commande bistable
17		ISO 361	Rayonnement ionisant

a: these instructions must be consulted whenever the symbol 14 in the table above is marked on the appliance. in order to know the nature of potential dangers and any action to be taken to avoid them.

LABOPUR AIR RECIRCULATION BOXES : H50+, H50+S AND H40+

1. DESCRIPTION / USE

The H50+, H50+S and H40+ air recirculation units extract toxic vapours from your cabinet. They are purified as they pass through the activated carbon filter, then released into the atmosphere without any danger to the environment. The filtration system in these cabinets is tested and approved to standard NF X 15-211.

1.1. Compliance :

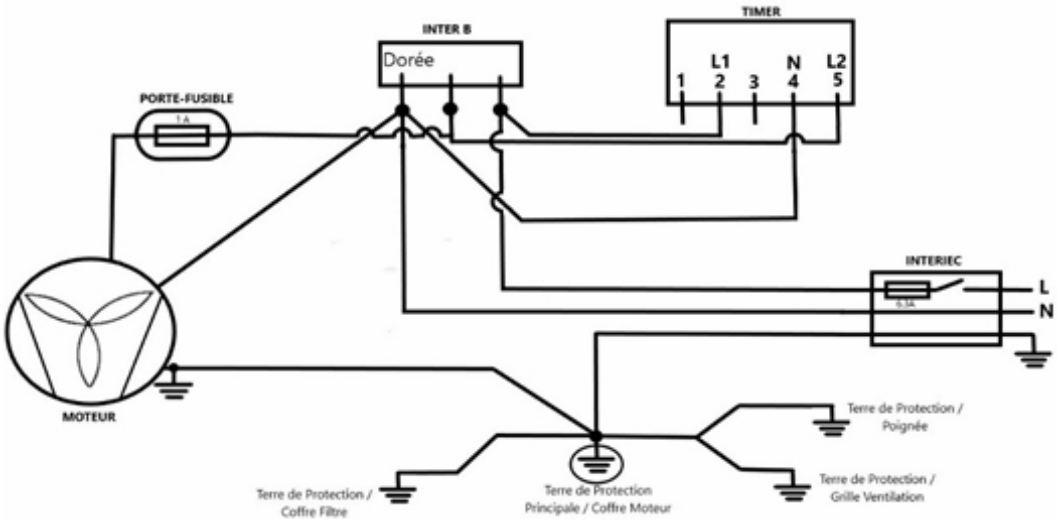
- Adsorption capacity of activated carbon filters and filtration system tested and approved to NF standard X 15-211 - May 2009.
- Electrical assembly compliant with the requirements of Low Voltage Directive 2014/35/EU and EMC Directive 2014/30/EU.
- Equipment complying with the requirements of EN 61010-1:2011+A1:2019, IEC 61000-3-2:2019, IEC 61000-. 3-3 :2013+A1 :2019.
- Signs complying with ISO 3864 and European Directive 92/58/EEC.

1.2. Technical characteristics of the H50+ and H50+S containers:

- 3 connection options.
- Ventilation system operating indicator light.
- Filter presence check window.
- High-efficiency activated carbon filter specialised and treated according to the products stored, tested to standard
  NF X 15-211 - May 2009.
- Hour meter showing the total time the cabinet has been in use.
- 12/10 steel construction+ epoxy paint, white RAL 9010 and blue RAL 5015.
- Suction diameter: 100 mm.
- Fuse to be used for main switch IEC socket: 250V / F6.3AL (Ø 5.2 x 20 mm).
- Fuse to be used for the IEC socket on the motor housing: 250V / F1AL (Ø 5.2 x 20 mm).

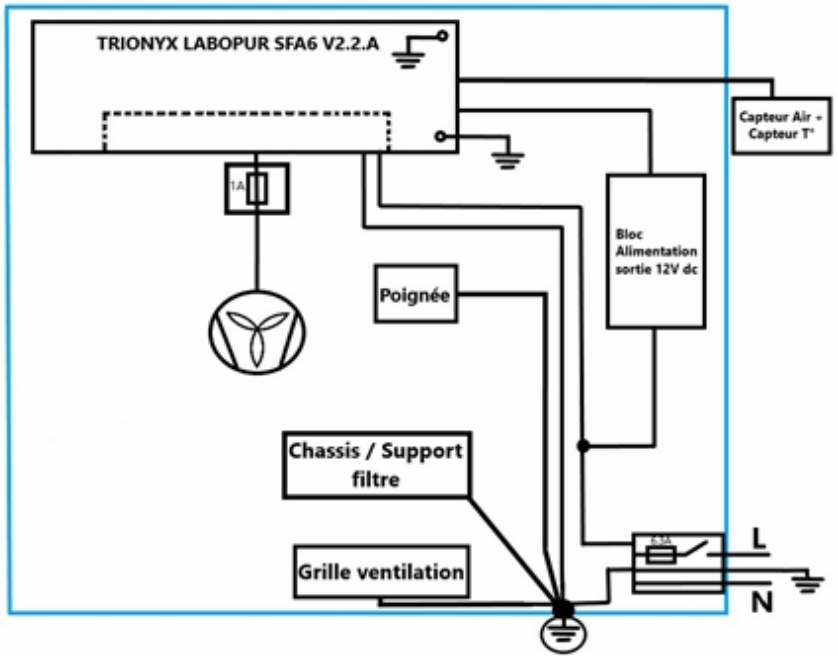
H50+ casing: Voltage: 220-240 V; Power: 20W; Fan sound power level (excluding air flow): 43dB(A); Maximum electric fan flow rate (excluding connection): 80 m3/h.

Electrical diagram of the H50+ box



- H50+S housing: Touch screen interface.
- Used to detect and warn of filter clogging or any airflow anomaly (e.g. door not working properly). closed) by an audible and visual signal.
- In compliance with standard NF X 15-211 - May 2009, the automatic airflow regulator analyses the airflow speed in real time and checks that the inside of the enclosure is under negative pressure.
- Voltage: 220-240 V; Power: 63W; Fan protection: IP54; Fan sound power level (excluding air flow): 60dB(A); Maximum electric fan flow rate (excluding connection): 180 m3/h.

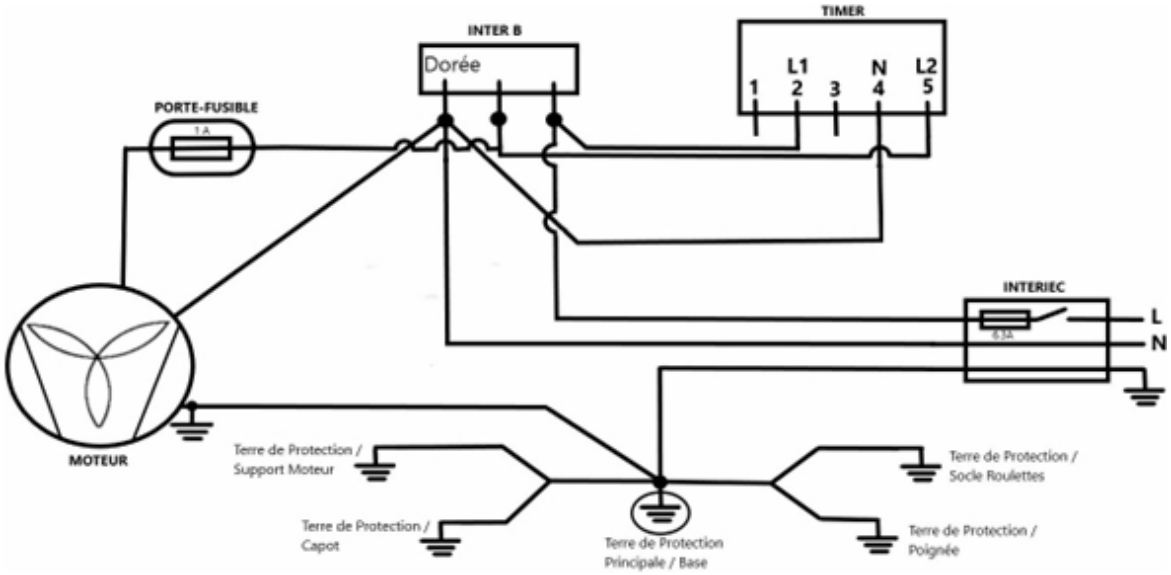
Electrical diagram of the H50+S box



1.3. Technical characteristics of the H40+ housing:

- Ventilation system operating indicator light.
- Filter presence check window.
- High-efficiency activated carbon filter specialised and treated according to the products stored, tested to standard
  NF X 15-211 - May 2009.
- Rear castor.
- Hour meter showing how long the filter has been in use.
- 12/10 steel construction+ epoxy paint, white RAL 9010 and blue RAL 5015.
- Fuse to be used for main switch IEC socket: 250V / F6.3AL (Ø 5.2 x 20 mm).
- Fuse to be used for the IEC socket on the motor housing: 250V / F1AL (Ø 5.2 x 20 mm).
- Voltage: 220-240 V; Power: 20W; Fan sound power level (excluding air flow): 43dB(A); Maximum electric fan flow rate (excluding connection): 80 m3/h.
- Suction diameter: 100 mm.

Electrical diagram of the H40+ box



1.4. Options :

- Activated charcoal filter for H50+ / H50+S cabinet (cabinet supplied without charcoal filter): filter reference to be chosen according to the products stored in the cabinet (Filter references: ORGFC / CORGFC / FORFC / AMMFC).
- Activated carbon filter for H40+ cabinet (cabinet supplied without carbon filter): filter reference to be chosen according to the products stored in the cabinet (Filter ref.: ORG50 / CORG51 / FOR50 / AMM50).
- Filter obsolescence check using REAGENT TUBES: Inspection port on the front of the housing. Hole for inserting specialised reagent tubes. Use of a manual pump.
- Optional connection kit (Ref: KRC): Allows the box to be easily connected to a safety cabinet. It consists of a 100 mm diameter sleeve (Ref: CHJ) to be fixed to the cabinet ventilation outlet; 1 m of 100 mm diameter flexible hose (Ref: KL100) and two 100 mm diameter hose clips (Ref: CDS100).

H50+ H50+S and equipment

Reference	Designation	Dimensions H x W x D (mm)	Weight (kg)
H50+	Recirculating air box (supplied without filter)	310 x 510 x 485 mm	15
H50+S	Recirculating air box with filter alarm 6 (supplied without filter)	310 x 510 x 485 mm	15
ORG50	Activated carbon filter for organic vapours	70 x 390 x 390	8
CORG51	Multi-purpose activated carbon filter [1]for organic and corrosive vapours	70 x 390 x 390	9
FOR50	Activated carbon filter for formaldehyde vapours	70 x 390 x 390	9
CAR50	Element for use without activated carbon filter (for compulsory external discharge)	70 x 390 x 390	2
PMAF	Manual pump	-	0,4
TROR	10 "organic" test tubes	-	0,1
TRAC	10 "corrosive" test tubes	-	0,1
TROA	5 "organic" test tubes and 5 "corrosive" test tubes	-	0,1
KRC	Housing connection kit	-	1

h40+ and equipment

Reference	Designation	Dimensions H x W x D (mm)	Weight (kg)
H40+	Vertical recirculating air box (supplied without filter)	630 x 270 x 460	15
ORGFC	Activated carbon filter for organic vapours	100 x 200 x 400	8
CORGFC	Multi-purpose activated carbon filter [1]for organic and corrosive vapours	100 x 200 x 400	9
FORFC	Activated carbon filter for formaldehyde vapours	100 x 200 x 400	9
CARFC	Element for use without activated carbon filter (for compulsory external discharge)	100 x 200 x 400	2
PMAF	Manual pump	-	0,4
TROR	10 "organic" test tubes	-	0,1
TRAC	10 "corrosive" test tubes	-	0,1
TROA	5 "organic" test tubes and 5 "corrosive" test tubes	-	0,1
KRC	Housing connection kit	-	1

2. INSTALLATION & COMMISSIONING

The box you have just received has been protected and transported in optimal conditions so that it can be preserved from any deterioration due to transport.

2.1. Installing the H50+ / H50+S box :

The box can be placed directly on the cabinet or connected using a connection kit (Ref: KRC, not supplied) ... Make sure that the box is correctly positioned and that its base is flat to prevent it from falling.

1st solution: The box is installed directly on the enclosure's 100 mm diameter ventilation outlet.

You can fit your casing directly onto the 100 mm diameter outlet of your cabinet. To do this, remove one of the 2 plastic covers on the underside of the cabinet (diagram 1, below), position the foam gasket around the cabinet ventilation outlet and insert the sleeve of your cabinet into the hole in the cabinet.

Solution 2: The box is connected to the cabinet using a connection kit (not supplied).

The casing can be connected to the cabinet either via the hole on the left side (diagram 3) or via the hole at the rear of the casing (diagram 2). Position the 100 mm dia. metal sleeve on the cabinet roof using the self-drilling screws provided. After removing the black cover, connect the sleeve on your cabinet to the sleeve on the box, using a Ø 100mm flexible hose (reference KL100, available in the connection kit reference KRC).

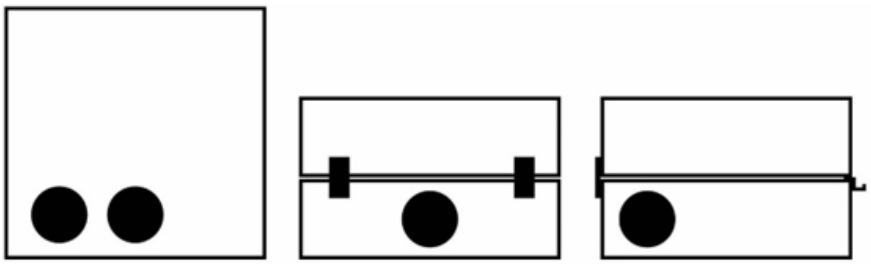


schéma 1 (vue de dessous) | schéma 2 (vue de derrière) | schéma 3 (vue du côté gauche)

2.2. Installing the H40+ box

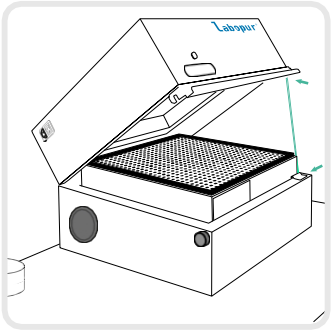
The pedestal can be placed directly next to the under-cabinet unit. Make sure that it is correctly positioned and that its base is flat to prevent any risk of it falling.
Your box must be connected to the cabinet via the hole at the back of the box (see diagram below). Connect the air outlet sleeve on your cabinet to the sleeve on the cabinet, using a Ø 100mm flexible hose (reference KL100, available in the connection kit reference KRC).

2.2 Installing the H40+ housing

Before starting up the filtration unit, it is essential to check that it is fitted with an active carbon filter suitable for the products stored.
1. Switch off your cabinet by pressing the "0/1" switch and unplug the power cord.
electricity.
2. Unscrew the 2 black knobs on either side, anti-clockwise.
the blue handle on the front of the cabinet.
3. Lift the cover using the blue handle.
4. Hold the bonnet open using the grey stand on the right-hand side of the housing.
5. Unpack the filter and remove the protective films from both sides.
6. Fit the filter.
7. Close the cover, taking care not to trap your fingers.
8. Check that the writing on the filter label is the right way round.
9. Turn the 2 black knobs clockwise. 10. reconnect the power cable.
11 Press the on/off switch on the side of the unit to switch it back on.

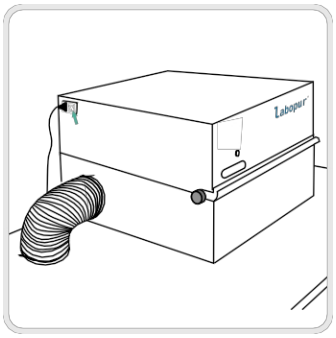
1

Remove the two protective films from the activated carbon filter



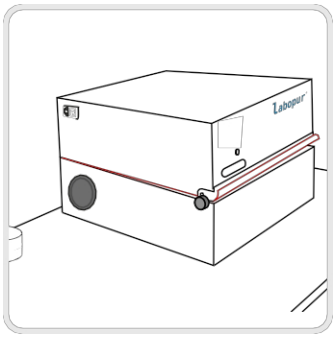
2

After switching off the unit, open the cover and fit the filter.



3

Closing the bonnet



4

Make sure that the bonnet is properly closed for it to work properly.

If you wish to operate the unit without an activated carbon filter, you must fit it with a kit for use without an activated carbon filter, reference CAR50. The ventilation outlet on the top of the unit must be connected to the outside. To evacuate the vapours, the air outlet must be connected to the outside of the building using a Ø 100 mm connection sleeve (reference CHJ, not supplied) and a Ø 100 mm flexible hose (reference KL100, not supplied). To fix the sleeve, use the self-tapping screws provided.
Do not turn on the fan until the ventilation outlet on the casing is connected to an extraction duct to the outside if you are using the casing without a charcoal filter.

Warning:

- Old filters must be changed by a person familiar with the risks involved in handling them.
  toxic products. This person must wear the appropriate PPE.
- You should not store chemicals in your cupboard if it is not fitted with a suitable activated carbon filter, as this would put your health and that of people in the room at risk.
- Refer to the booklet available on our documentation site to define the activated carbon filter.
  adapted to the chemicals used.
- When you store several toxic products simultaneously, the sum of the ratios of the concentrations of the products to the corresponding TWA must be kept below 1 (law of additivity).
- Some carbon dust may be found at the bottom of the filter protection bag. This is due to vibrations during transport and is therefore completely normal. The loss of this dust has no effect on the absorption efficiency of your activated carbon filter.

2.4. Commissioning and use

The filter box must be installed, used and maintained in such a way as to guarantee the protection of users.

On/off switch
Before using the housing, make sure you have followed the instructions in the quick installation guide supplied with the equipment (or that you have followed the previous instructions for installing the filter).
Connect the power cable to the socket at the top rear of the cabinet. Connect this cable
to a mains socket.
The on/off switch is located on the side of the cabinet (with the IEC plug).
To switch the unit on, after connecting the unit to the mains (using the cord supplied), press the on/off switch.
The indicator light on the switch will come on.

Warning:
- It is imperative that you switch on the subwoofer before introducing products into the enclosure.
  storage.
- The filtration system must be left running at all times, as long as products are stored inside the cabinet.

Hour meter

Warning
We recommend that you regularly check the saturation of your filter using the manual pump and suitable reagent tubes. To find the right reagent tubes for the products you want to measure, please contact us.

Cabinet H50+ / H40+ :
After switching on the cabinet, press the Timer switch on the front panel. The indicator light next to the switch will come on. The fan and timer will start up. To switch the fan off, turn the front panel switch to off. To switch off the timer, press the timer start/stop button. N.B.: The timer can only be stopped manually.
Then press the on/off switch at the rear of the unit. Unplug the power cable from the wall socket to cut off the power supply to the cabinet.
When you use your box for the first time, and after each prolonged power cut, you will need to set the hour meter located at the top left of the front of the box. To do this, follow the procedure below:

- Press PROG, the number on the left flashes,
- Press+ or - to display 60,
- Press PROG, the middle number flashes,
- Press+ or - to display 00,
- Press PROG, the number on the right flashes,
- Press+ or - to display 00.

The hour counter counts down automatically as soon as the on/off switch with operating indicator light has been pressed.
To set the hour meter, your unit must be connected to the mains BUT the on/off switch must be off.
must be in the off position.

In accordance with standard NF X 15-211, you should check the saturation of your activated carbon filter every 60 hours. The hour counter will warn you every 60 hours, by means of an audible signal, that you need to check the saturation of your filter.
To check the saturation of your activated carbon filter, check it regularly using the manual pump and suitable reagent tubes. To find the right reagent tubes for the products you want to measure, contact us.

Housing H50+S :
This subwoofer is fitted with a speaker controller. This is located at the top left, on the front of the unit. It is a touch screen. It starts up automatically as soon as you press the on/off switch on the subwoofer. Once the system has warmed up, press the green "on" button on the home screen to start the ventilation system.

When the unit is used for the first time and after each prolonged power cut, it is necessary to set the hour counter displayed on the touch screen on the front of the unit. The hour counter counts down automatically as soon as the ventilation is switched on by pressing the green button on the touch screen home screen. When the programmed number of hours has elapsed, the counter turns red and an alarm sounds. The filter should then be checked for saturation.
To set the hour meter, the unit must be connected to the power supply and the ventilation running.
functioning.
Caution: Do not put chemicals on the screen. Do not touch the screen with gloves soiled with chemicals or other products that could damage the screen.

3. TOUCH SCREEN INSTRUCTIONS (H50+S HOUSING)

Step 1: First-time use

Select the type of filter you have installed. The type of filter is indicated on the filter label on the front of the casing, in the viewing window. For any other type of filter or for an installation without a filter (with a CAR), tick the "Special" box.

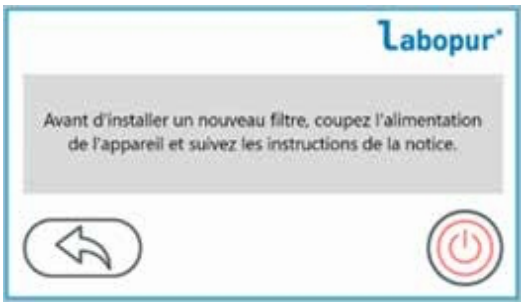
If this screen is not displayed, go directly to step 1.1 and following. Otherwise go to step 2.

Step 1.1: The filter selection screen is not displayed

This step is not necessary if you have followed the instructions in step 1.
Press the "Change filter" button.

Step 1.2: Quick installation guide

If you are installing a filter, turn off the unit using the switch on the top left-hand side at the back of the unit, unplug the wall socket and follow the instructions in the quick installation guide supplied with the unit and on the filter box.
Once this step is complete, restart the unit and return to step 1 "Initial installation".

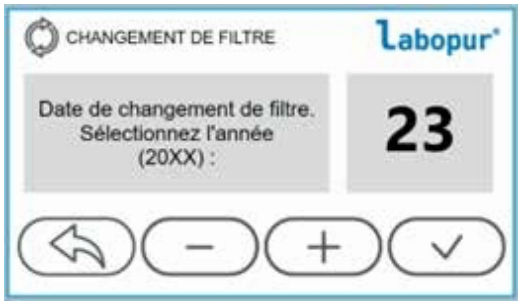


Step 1.3: Selecting the installed filter

Select the type of filter you have installed. The type of filter is indicated on the filter label on the front of the cabinet, in the viewing window.

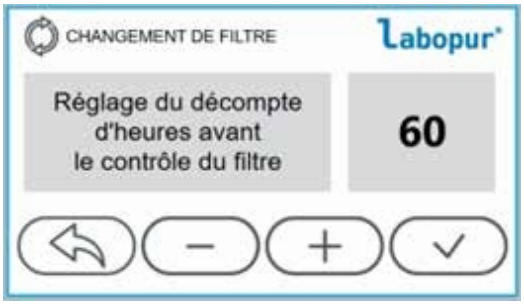
Step 2: Selecting the installation date

Select the date (day, month, year) on which the filter was installed using the "+ " and "-" buttons on the screen and validate with the "valid" button



Step 3: Selecting the hour counter

By default, the hour counter is set to 60 hours, and it is recommended to check the filter saturation after 60 hours of use. Use the "+" and "-" buttons to select "60" on the screen and press the "OK" button to confirm. After 60 hours, an audible and visual alarm will go off to warn you that the countdown is over and that you need to check the saturation of your filter.

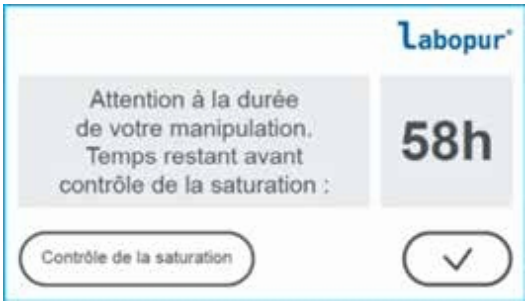


Step 4: Starting up the cabinet

You have now completed the hardware installation steps. Press the green start button in the centre of the screen to start using the cabinet.

Step 5: Validating the timer

Check that the number of hours remaining is 60 hours. If this is not the case, press the "Saturation control" button. If the counter shows 60 hours, confirm with the "validate" button at the bottom right of the screen.

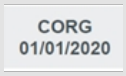


Step 5.1: The counter does not display the value you selected

Press the "Unsaturated filter" button to reach the counter selection screen. Return to step 3.

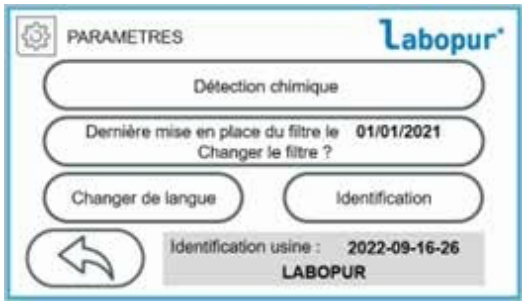
Step 6: Home screen

Air flow: Displays the air flow in real time.
Next check: Displays the time remaining before the next saturation check of the filter(s).

-	Designation
	Mutes the audible alarm when it goes off
	Displays the type of filter installed and the date the filter was installed
	Go to the "Settings" tab
	Enables the equipment to be put on standby

Step 7: Settings

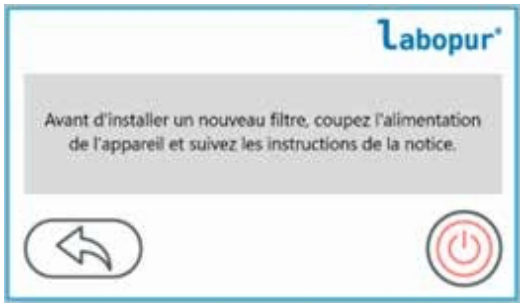
Chemical detection: accesses the "Chemical detection" screen Change filter : Enables you to access the "Change filter" screens Change language: Enables you to access the "Languages" menu Identification: Enables you to name/identify the cabinet



Step 8: Chemical detection (this option does not apply to the H50+S enclosure)

Step 9: Changing the filter

The "Change filter" button takes you to the filter change procedure. Press the red button and then press the red button again.

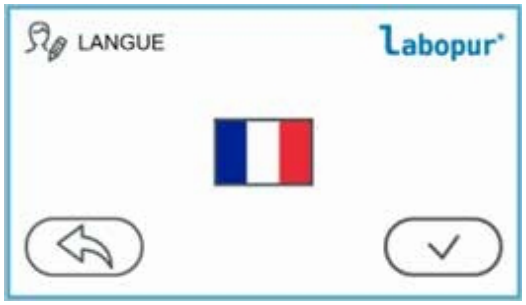


Then press the switch on the top left-hand side at the back of the cabinet and pull out the plug. wall.

Follow the instructions in the quick installation guide or on the filter box. Then plug in the wall socket and restart the unit using the switch.
Go to step 3 and follow the instructions.

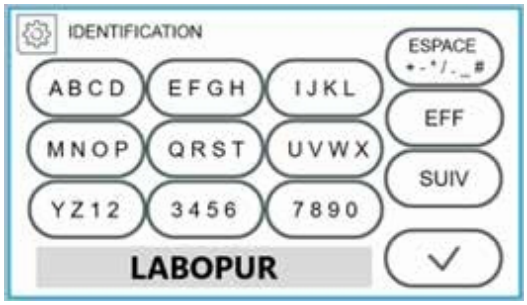
Step 10: Changing languages

You can choose from 5 different languages. Select the one you want, then press the validate.



Step 11: Identification

You can rename your filtration unit. The default identification is "LABOPUR".
To change the identification, use the "EFF" key to delete the letters one by one. Press the key of the letter you are looking for as many times as necessary to scroll through the letters until you reach the letter you want. Press the "NEXT" button to confirm your choice of letter and move on to the next one.
Once the identification has been entered correctly, validate the new identification by pressing the "valid" button.



Step 12: Air flow

The button in the "Airflow" box takes you to the procedure to follow in the event of a problem with the airflow. air.
Check that the cabinet door is closed properly.
Check that no objects are placed on the cabinet filter box. Check that the honeycombs are not blocked.
If the problem persists, follow the procedure.

If the actions carried out previously are not sufficient, contact Labopur after-sales service:
E-mail : sav@labopur.fr
+33 1 46 45 80 00

Stage 13: Next inspection

Standard NF X 15-211 recommends checking the saturation of the activated carbon filter every 60 hours. The hour counter on the touch screen will warn you that you need to check the saturation of your filter, by means of an audible signal and the counter turning red.
The button in the "Next check" box is used to access the procedure to be followed when the counter or if you want to check filter saturation.

You will need test tubes and a pump to check the saturation level of the filter (available to order from our sales department: commercial@trionyx.fr). Depending on the result of your test, there are two possible choices.
If your filter is not saturated, go to step 5.1 and follow the instructions.
If your filter is saturated, you must stop using your cabinet and change the filter. To do this, press the change filter button and follow the instructions in step 9.

The filtration system is fitted with a probe to measure the speed of the air as it passes through the filter. Any anomaly in the airflow is indicated by an audible and visual signal. It can also be used to detect any clogging of the filter. In normal operation, the "Air flow" frame is light grey. In the event of a malfunction, the "Airflow" frame will turn red and an audible signal will sound to let you know that a malfunction has been detected. To silence the signal, press the button marked with the buzzer symbol. If the alarm goes off, this means that there is a malfunction.

If this happens, please follow the instructions below:

- Check that there are no windows or doors open nearby. This can cause turbulence in the air flow.
- Check that your cabinet is fitted with an activated carbon filter at the bottom of the motor housing. There is a viewing window at the front of the cabinet through which you should see a white or coloured label indicating the type of filter you have.
- The label may include the following information:
  - ORG for organic vapours ;
  - CORG for organic and corrosive vapours ;
  - FOR for formaldehyde vapours ;
  - MA for amine vapours ;
  - CAR (element for use without activated carbon filter, for use with powders only).
- Please also check that the filter is facing the right way (as shown on the label).
- In addition, check the date of the last change of activated carbon filter. If it is more than a year old, we recommend that you change it, so don't hesitate to contact our sales department.
- Check that the filter box is properly closed.
- Check that the cabinet door is closed properly.
- Check that there are no objects on the enclosure motor housing.
- The box may start ringing as soon as it is installed on your premises. The environment in which it has been checked is different from its place of installation, recalibration may be necessary.

The measuring system should only be recalibrated if all the other parameters have been checked and validated beforehand.

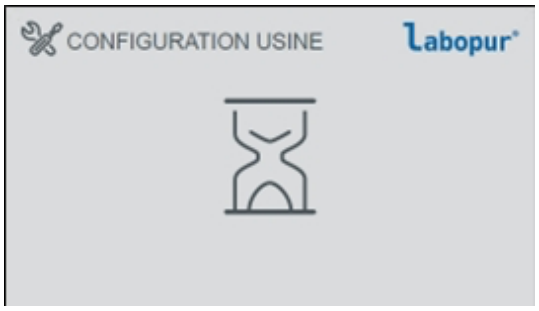
4. SPEAKER CONTROLLER RECALIBRATION (H50+S CABINET)

Before recalibrating, make sure you have followed all the steps to check for any problems that could prevent the ventilation from working properly. If the problem persists, turn off the equipment using the main switch on the side and follow the steps below.

Step 01: Access factory mode to reconfigure the equipment

Unscrew the screws securing the top covers to gain access to the technical part of your equipment.
on top of the touch screen.
Pay attention to the earthing wire on the top cover
To access factory mode, hold down the "FACTORY MODE" button on the circuit board and restart the equipment using the main power switch on the side.

The screen displayed is as follows:



Press the screen to continue.

Step 02: Setting the air flows

Confirm the rest of the screens by pressing the "valid" button until the following screen appears:

The air sensor needs to be calibrated to display the measured air flow.
To calibrate the air sensor, without an anemometer, use the "+ " and "-" buttons to set the motor power to 70% for an airflow of 0.6m/s, and wait for the airflow to stabilise when the motor power background changes from red to green. Press the "valid" button on the bottom right to move on to the next speed.

Set the motor power to 55% for an airflow of 0.45m/s using the "+ " and "-" buttons, and wait for the airflow to stabilise when the motor power background changes from red to green. Confirm with the
Press the "valid" button on the bottom right to move up a gear.

Use the "+ " and "-" buttons to set the motor power to 40% for an airflow of 0.3m/s, and wait for the airflow to stabilise when the motor power background changes from red to green. Confirm with the
Click on "valid" in the bottom right-hand corner to move on to the next stage.

Step 3: Setting the engine power

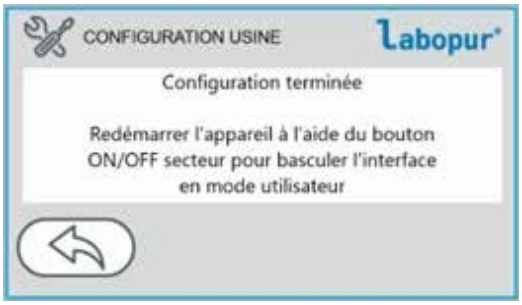
Use the "+ " and "-" buttons to adjust the equipment's motor power according to its use and purpose. Refer to the table below. Confirm the setting with the "valid" button.

Equipment	Use	Motor % setting
H50+S	790+ Series	50%
H50+S	3030 Series	50%

Step 4: Choosing the type of equipment with or without a chemical sensor

Choose the "No chemical sensors" option:

Confirm the following screens without making any changes until you reach the final screen:



Step 5: End of recalibration

Switch off the equipment by turning the main power switch on your equipment to "0".
Switch your equipment back on using the same switch to return to user mode.

List of error codes

Code	Meaning / Action to be taken
M1A	Motor No. 1 malfunctions. Check that the plugs on the subwoofer are connected correctly. Check that the cables are not cut
M1B	Motor No. 1 measured speed fault. that the box sockets are correctly connected. Check that the cables are not cut.
C1A	Air sensor malfunction. Restart the equipment
C1B	
C1C	

5. SPARE PARTS

Code	Ref	Description
H50+ / H50+S	ORG50	Activated carbon filter for organic vapours
	CORG51	Multi-purpose activated carbon filter for organic and corrosive vapours
	FOR50	Activated carbon filter for formaldehyde vapours
	AMM50	Activated carbon filter for amino vapours
	CAR50	Element for use without activated carbon filter
H50+ / H50+S / H40+	TIMER	Hour meter (H50+ / H40+)
	SFA6	Speaker controller (H50+S)
	PMAF	Manual pump
	TROR	10 "organic" test tubes
	TRAC	10 "corrosive" test tubes
	TROA	5 "organic" test tubes and 5 "corrosive" test tubes
	KRC	Housing connection kit
H40+	ORGFC	Activated carbon filter for organic vapours
	CORGFC	Multi-purpose activated carbon filter for organic and corrosive vapours
	FORFC	Activated carbon filter for formaldehyde vapours
	AMMFC	Activated carbon filter for amino vapours
	CARFC	Element for use without activated carbon filter

CDV-A VENTILATION UNITS

1. DESCRIPTION / USE

The CDV-A ventilation unit extracts stagnant toxic vapours from a safety cabinet storing hazardous products, preventing them from accumulating and discharging them outside the establishment.

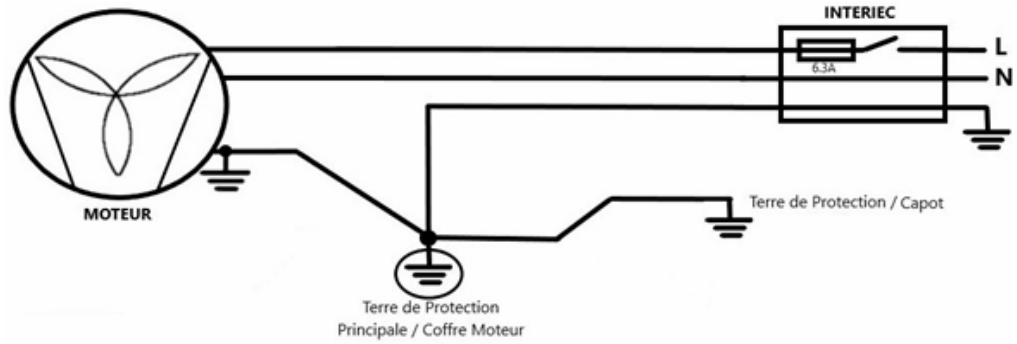
1.1. Compliance :

- Electric fan compliant with ISO 3744 standards.
- Electrical assembly compliant with the requirements of Low Voltage Directive 2014/35/EU and EMC Directive 2014/30/EU.
- Equipment complying with the requirements of EN 61010-1:2011+A1:2019, IEC 61000-3-2:2019, IEC 61000-. 3-3 :2013+A1 :2019.
- Signs complying with ISO 3864 and European Directive 92/58/EEC.

1.2. Technical specifications :

- Connection via 100 mm diameter flexible hose (optional).
- On/off switch with indicator light to control fan power supply.
- 12/10 steel construction+ white epoxy paint RAL 9010.
- Fuse to be used for main switch IEC socket: 250V / F6.3AL (Ø 5.2 x 20 mm).
- Voltage: 220-240 V; Power: 63W; Fan sound power level (excluding air flow): 57dB(A); Maximum electric fan flow rate (excluding connection): 240 m3/h.
- Suction and discharge diameter: 100 mm.

Electrical diagram of the CDV-A cabinet



1.3. Options :

Optional connection kit (Ref: KRC): Allows you to easily connect the box to a safety cabinet. It consists of a 100 mm diameter sleeve (Ref: CHJ) to be fixed to the cabinet ventilation outlet; 1 m of 100 mm diameter flexible hose (Ref: KL100) and two 100 mm diameter hose clips (Ref: CDS100).

Reference	Designation	Dimensions (overall) H x W x D (mm)	Weight (kg)
CDV-A	Steel ventilation box	235 x 260 x 245	8
KRC	Housing connection kit	-	1
KL100	Flexible hose diam. 100 mm, per metre	-	0,2
CHJ	Steel connection sleeve diam. 100 mm	-	0,1
CDS100	Clamp diam. 100 mm	-	-

2. INSTALLATION AND COMMISSIONING SERVICE

The box you have just received has been protected and transported in optimal conditions so that it can be preserved from any deterioration due to transport.

2.1. Installation

The housing can be placed directly on the cabinet, fixed to the wall (accessories not supplied), or placed on a bench... However, take care to place the cabinet on a rubber or foam mat to absorb any vibrations. Make sure that it is placed correctly and that its base is flat to prevent any risk of it falling.

First, check that your safety cabinet is fitted with a 100 mm diameter connection sleeve, reference CHJ.

Connect the ventilation outlet of your cabinet to the connection sleeve of the casing, using a 100 mm diameter flexible hose (supplied as an option, included in the connection kit reference KRC). Use a 100 mm diameter hose clamp (supplied as an option, included in connection kit part no. KRC) to secure the hose to the cabinet connection sleeve, and a second clamp to secure the hose to the plenum connection sleeve.

Then connect the 100 mm diameter ventilation outlet of the casing to the outside using a 100 mm diameter flexible hose (optional reference KL100). Use a 100 mm diameter hose clamp (supplied as an option, included in connection kit part no. KRC) to secure the hose to the casing exhaust sleeve.

The fan must not be switched on until the ventilation outlet on the housing is not connected to an extraction duct to the outside.

Once the exhaust is connected to the outside, connect the supplied power cord to the fan unit, then to a mains socket (220-240 volts, 50 Hz) and press the "0/ 1" button. The light on the switch will come on. The unit is now operational.

Your ventilation box must be installed, used and maintained in such a way as to guarantee the protection of users.

3. SPARE PARTS

Ref	Description
KL100	Flexible hose diameter 100 mm
CDS100	Clamp diameter 100 mm
CHJ	Connection sleeve diameter 100 mm
KRC	Connection kit

SAFETY CHECKS AND MAINTENANCE SOUNDS H50+ / H50+S / H40+ / CDV-A

The ventilation/filtration unit is a safety element in its own right. To ensure that it is fully effective, the equipment should be checked regularly.

Filter saturation controls (depending on model) :
To check the saturation of the activated carbon filter, use a manual pump (reference PMAF) and the corresponding reagent tubes (consult us for the reagent tubes to be used). To do this, follow the instructions given in the manual for the pump and reagent tubes. It is imperative that you replace the activated carbon filter as soon as the indication on the reagent tube reaches 50% of the TWA (mean exposure value).
The first pollutant released by the filter is the one with the lowest molecular mass. For the same molecular weight, it is the one with the lowest boiling point. The reagent tube should be inserted into the sampling port on the front of the chamber.

Daily safety checks :
- Check the casing for corrosion.
- Check the casing for mechanical damage.
- Check that the fan is working properly.
- Check that the airflow is sufficient to ensure good air renewal in the enclosure

Monthly safety checks :
- Check that the fan is working properly.
- Check that your activated carbon filter is saturated (depending on the model).

Annual safety checks :
Activated carbon filters have a maximum service life of one year. They should therefore be replaced at least once a year.
once a year.

These checks should be carried out by your establishment's maintenance department. If in doubt, or if you have any questions, please contact your usual dealer.
To avoid damaging the equipment, it should be cleaned with soapy water only.
We would remind you that you must wear personal protective equipment for any work you carry out.
adapted.

ATEX RADIAL VOLUTE FAN UNIT
II - 2G EX EB IIC T4 GB : MATEX100

1. DESCRIPTION / USE

The fans are suitable for evacuating aggressive, dust-free, low-aerosol gases and pure air. Explosive atmospheres can only be exhausted using fans specially designed for this purpose. This fan is suitable for Zone 2 extraction and for installation inside Zone 2.

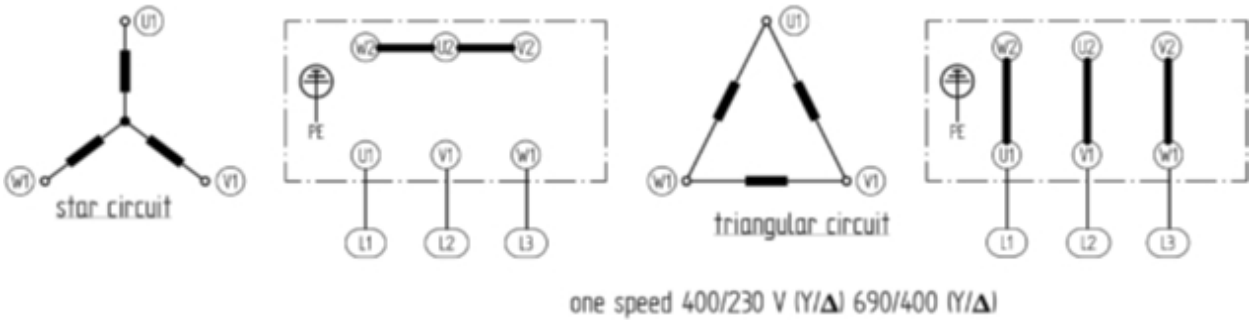
Marked Ex II 2G Ex eb IIC T4 Gb, this fan complies with Directives :
- Machine 2006/42/EC, Annex II A for machines ;
- Low Voltage 2014/35/EU, Annex III;
- EMC 2014/30/EU, Annex I and II ;
- RoHS 2001/65/EU and 2015/863 ;
- On equipment and protective systems intended for use in potentially explosive atmospheres 2014/34/EU.

The fan has been designed, developed and built exclusively for industrial use. The fan is not suitable for domestic use.

Technical features
- Corrosion-resistant plastic radial fan with volute made from PPs (low-flammability, electrically conductive polypropylene).
- PP-el turbine.
- Epoxy-painted sheet steel fan frame.
- Ambient temperature: 20°C to 40°C.
- Voltage: 230V; Frequency 50 Hz; rated current 1.37 A.
- Noise level: 65dB(A) (excluding air flow).
- Motor protection: IP55.
- Ex classification: II 2G Ex eb IIC T4 Gb.
- Maximum flow rate of electric fan (excluding connection): 100 m3/h.
- Rubber vibration dampers.
- Connections with flexible sleeves on suction and discharge sides, diameter 75 mm.

Reference	Designation	Dimensions H x W x D (mm)	Air flow rate (m^3/h)	Suction diameter (mm)	Weight (kg)
MATEX100	ATEX radial volute fan	400 x 230 x 377 mm	100	75	8,5
ELE75	Rigid PVC reducer	-	-	75/100	-

MATEX100 wiring diagram



2. INSTALLATION & COMMISSIONING

The fan you have just received has been protected and transported in optimum conditions to ensure that it has not been damaged in transit. When you receive the fan, check that no damage has occurred during transport. If this is the case, do not commission the fan and contact the carrier immediately.

Installation, assembly and initial commissioning must be carried out by qualified personnel who are familiar with the risks due to electrical currents and the chemical and physical characteristics of combustible gases and dusts in hazardous environments. They must also know what to do if the motor stops, to prevent it from restarting accidentally.
The information on the nameplate corresponding to the voltages and frequencies of the power supply and other electrical and mechanical data, as well as the safety information concerning the motor (type of protection, temperature class, ambient temperature, etc.).
These personnel must have received appropriate training for this work. Installation must be carried out in accordance with EN 60079-14 or current standards. Installation must be carried out in accordance with the connection diagram above.

Before installation in an explosive atmosphere, the installer must check that the motor is suitable for the classification of the zone and the characteristics of the various flammable substances, gases or dusts present in the zone where the motor will be installed. It is essential to check the marking on the nameplate before installation.
The fan must be installed in such a way as to ensure that there is a gap where the shaft passes through.

The fan should be mounted on vibration dampers that are screwed into the base frame at pre-drilled points and anchored into the foundations on site. This essential technique absorbs oscillations/vibrations and prevents damage to the drive system and fan.
Do not operate the fan without it installed! Free rotation of the fan must always be guaranteed.
without the slightest hindrance.

The fan is fitted with a terminal box (or maintenance switch) for connection to the mains supply. The motor casing must be closed with a certified seal in accordance with EN IEC 60079-0 and EN IEC 60079-1. The user must connect the final parts of the cables using one of the protection methods specified in standard EN 60079-0. The power supply can be cut off by means of a maintenance switch (if not already installed on the fan).
Cable glands or any other connections must be screwed fully onto the cable entries on the
motor terminal box: 5Nm tightening torque.

Wiring must be carried out using cables with an overall operating temperature of the sheath at least equal to the maximum ambient temperature of the motor +25°C and an insulation temperature of the conductor at least equal to the maximum ambient temperature of the motor +35°C.
Before commissioning for the first time, check that the fan is running in the correct direction (direction arrow on fan casing) and that the maximum speed has not been exceeded (see nameplate).
Ventilation must be unobstructed to facilitate the entry and exit of air from all directions, and must not be disturbed by conflicting neighbouring elements. In order not to disrupt ventilation, a minimum distance of 40mm must be maintained between the rear of the ventilation cowling and any element likely to interfere with the intake of the air needed to cool the engine. Hot elements near the motor should also be avoided, as they could affect cooling temperatures as well as those of the motor itself.
If there is a risk of foreign objects falling into or being sucked into the fan, a protective grille (min. protection IP20 to EN 60529) must be provided in the pipework connected upstream and downstream of the fan.

The interior of the fan and the upstream and downstream ducts and units must be kept free of foreign objects (tools, installation equipment, etc.).
Before connecting the fan to the mains and switching it on, the mains (suction and discharge sides) must have been connected.

24 hours after initial commissioning, check the assembly for leaks; check that it is operating correctly; check the temperature of the bearings; retighten the screws.

WARNING :
Before working on the fan, make sure it is switched off and disconnected from the mains supply.
Do not open in an explosive atmosphere.
If the fan is intended for an installation with a free inlet or outlet, the operator must prevent the ingress of foreign bodies that could cause ignition.
Repair and maintenance of ATEX fans must only be carried out by qualified ATEX personnel using original spare parts.
The supply voltage and frequency at the place of installation must be identical to those specified on the motor label.
The power supply cable must be protected against damage and sized correctly according to
power.
Pipe connections to the fan must only be made using flexible fittings (compensators).

Connection to electrical circuits
This operation should only be carried out by qualified personnel.
The connection must be made either via the cable gland(s) supplied with the motor, or via a cable gland or other device which must be certified in accordance with directive ATEX 2014/34/EU.
Always refer to the motor nameplate to check the voltages and frequencies, so that they match the power supply to be made. If nothing is specified, the permitted voltage tolerance is +/- 5% and 1% for the frequency compared with the indications on the nameplate.
The power supply cables must be sized to match the currents indicated on the
nameplate.
The motor must be protected by a circuit breaker which, in the event of an overload, can cut off the power supply so that the motor surface temperature does not exceed the maximum flammable temperature of the gases or powders in the surrounding atmosphere.

3. MAINTENANCE

Maintenance, cleaning and repair work may only be carried out by qualified personnel. To ensure that the fan

operates perfectly, it must be cleaned and serviced as follows
on a regular basis.
Cleaning, maintenance and repair work may only be carried out in a non-explosive atmosphere.
When the power supply is disconnected for cleaning, maintenance or repair work, it must be protected against accidental reconnection by the user by blocking the main or maintenance switch with a lock.
For safety reasons, the tools used for this work must be made of non-sparking materials.
The maintenance intervals given below are given by way of example and should be adapted according to use:

- Weekly: keep the fan and the area around the fan clean (free of dust, liquids, etc.);
- Weekly: clean the surface of the engine to prevent dust and oil deposits;
- Monthly: clean the electric motor ailerons to avoid any risk of overheating;
- Monthly: Check inlet and outlet pipe connections for leaks;
- Monthly: Check that the fan is correctly and stably installed;
- Monthly: Check that the screws are properly tightened (during operation, the fan is subjected to vibrations which may cause the screws and tightening links to loosen) ;
- Monthly: check that the motor runs freely without abnormal vibrations or excessive noise. If there is any vibration and/or noise, check that the motor is properly secured and balanced and that the bearings are in good condition;
- Every six months: clean the turbine to prevent it becoming clogged.

During cleaning work, it is compulsory to use personal protective equipment (e.g. gloves) in accordance with regulations on the protection of workers at work.

RECYCLING

The filter/ventilator/fan housings can be completely dismantled. The various components, such as metal, can be disposed of separately for recycling. National and local waste disposal regulations must be observed. By their very nature, the various components of your housing must never be mixed with household waste.

GUARANTEE

The equipment is guaranteed for a period of 12 months against any manufacturing defect and under the standard conditions.
The goods must be in perfect condition for normal use, from the date indicated on the delivery note.
We are committed to the quality and conformity of the equipment we use and sell. The new equipment we sell is guaranteed against any manufacturing defect for a period of one year from the date shown on the delivery note. Our guarantee applies exclusively in the event of a defect resulting from a design fault or hidden defect and covers only the replacement of the equipment or parts recognised as defective by our quality and technical department. It is strictly limited to the repair of the equipment in our workshops. In the event of a warranty claim, the equipment will be collected from the customer's premises in accordance with the conditions laid down at the time of the initial delivery. Spare parts are guaranteed for 3 months after installation.

This guarantee cannot be invoked in the following cases:
- The equipment is not stored, used in accordance with instructions or maintained by the user.

in accordance with customary practice.
- In the event of damage to the equipment by the user or a third party.
- In the event of non-payment on the due date of all or part of the price of the equipment.
- The equipment has been modified or repaired by the user or a third party without our agreement.

or incompatibility with other equipment.
- In the event of normal wear and tear of the product
- In the event of damage caused by corrosion.

The implementation of the guarantee will not have the effect of extending its duration. Our guarantee automatically ceases if the purchaser does not notify us of the defect within 7 days of its discovery, a date which it is up to the purchaser to prove. This guarantee does not entitle the purchaser to compensation for costs, damage or operating losses.

Registration number FR021626 under article L. 541-10 of the French Environment Code.

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