



GEOVENT

INSTRUCTIONS MANUAL



AIRBOX III

source capture control panel

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1.0 General safety precautions

IMPORTANT – Please study all the instructions before mounting and commissioning.

Please keep these instructions in a safe place and instruct all users in the function and operation of the product.

Installation and service should only be implemented after studying the wiring diagram thoroughly.

Avoid the dismantling of any factory-mounted parts, since it impedes the commissioning of the equipment.

All electrical installations must be carried out by an authorised electrician.

1.1 Danger

Dismantling parts on the AirBox III whilst in operation could be deadly dangerous.

Always disconnect the AirBox III from the mains, when removing the cover.

2.0 Area of application

The AirBox III is designed to trigger an alarm in case the pressure is above or below, the programmed parameters. In Denmark an alarm system is required by law, on all ventilation systems. The functionality of the AirBox III, will in most cases be used for monitoring the differential pressure over a filter, and use the alarm function to trigger the cleaning process in the filter.

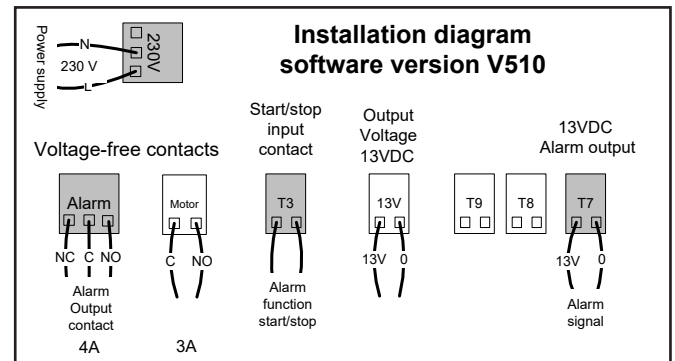
3.0 Technical data

The AIRBOX III is supplied with 8 active in- & outputs (terminal T2-T10). The built-in pressure sensor is used for pressure measuring and regulation, and is programmed and showed in the 4-figured display.

The Menu-functionality is programmed from the display by means of 4 keys, which gives access to adjustment and reading of the 8 process parameters (parameter P0-P19).

4.0 Basic installation of the AirBox III program 510

1. Connect the long piece of the supplied 4mm hose to the “-” connection on the built-in pressure transducer. Connect the other end to the clean side of the filter. NB! Avoid bends!!
2. Connect the other section of the 4mm hose to the “+” connection on the built-in pressure transducer. Connect the other end to the dust side of the filter. NB! Avoid bends!!
3. Select the right software program (510 for pressures between 10-5000Pa).
4. Short circuit the T3 terminal or connect to signal from on/off switch.
5. Connect the AirBox III to 230 Volts as shown in the diagram



5.0 Adjustment of parameters for differential pressure

Table of general parameters				
Par.	Label	Def.	Max	Description
P01	Min. alarm limit (Pa)	200	4999	Monitor alarm min. limit (Pa)
P02	Max. alarm limit (Pa)	5000	5000	Monitor alarm max. limit (Pa)
P75	Service timer	0	0-36	0=of 1-36=months between service
P76	Call service		Max 16 letters	Press and hold arrow down when connecting main power to type service message

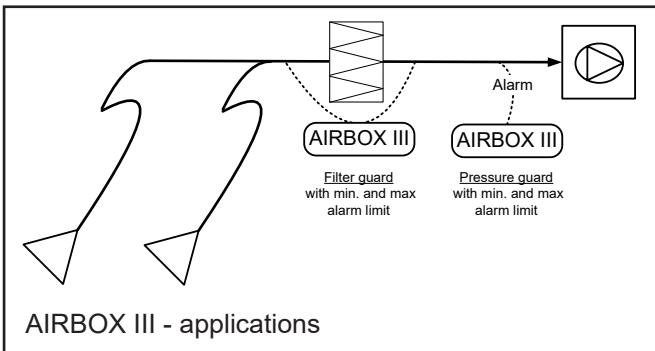
The AirBox III contains 2 software programs (510), which controls how the AirBox III behaves. The AirBox III is by default set to 510. We now want to set up the AirBox III for differential pressure.

1. After turning on the power, the Display will show “P0” on power-up
2. Press “ENTER” and select the appropriate soft

ware program by scrolling with the “+” and “-“ keys and the press “ENTER” once more.

3. Shift to P1 (the set point parameter) by using the “+” key and the press “ENTER” – adjust the value to your desired set point pressure (in Pascals) and press “ENTER” once more.
4. Shift to P2 and set the lower alarm point. In practice, this indicated the minimum pressure [Pa] that the AirBox III may reach before triggering the alarm function. Press “ENTER” once more.
5. Shift to P3 to set up the upper alarm area. In practice this point indicates the maximum pressure level [Pa] (this could fx. be 2000 Pa) that the AirBox III may reach before triggering the alarm function. Press “ENTER” once more.
6. In order to save all the adjusted parameters, use the “+” until you get to P10.
7. Keep the “ENTER” key pressed until you get a beep (tells you that the changes you have made are now saved in EEPROM).
8. In case of failure – cut the power for at least 20 seconds and put it back on. The AirBox III is now reset and you must start the programming procedure again.

5.1 Other settings



The alarm function can be turned of, by the T3 terminal off or setting the parameter P2 = 0.

The control function and the alarm function can also be turned on/off in terminal T4

6.0 Error correction

In case the Functionality of the AirBox III is not as expected, please use the following check-list:

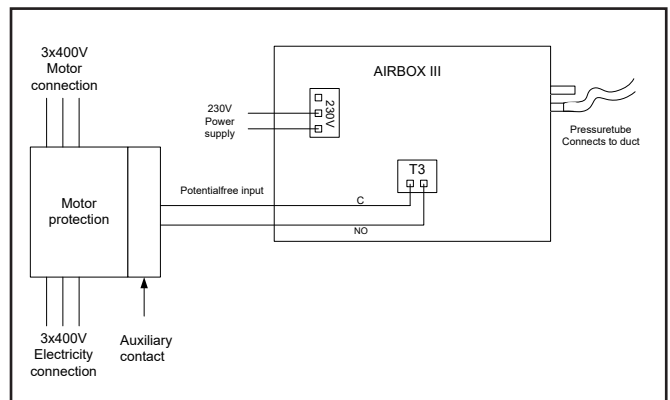
- The alarm function (green lamp) is switched off – Because T3 is not connected.
- The control is turned of – because T3 is not

short circuited

- The pressure sensor measures in-precisely – because the sensor is not calibrated precisely (ask your dealer)
- The pressure measurement is switched off or is un-precise – Because there is a bent on the pressure hose
- Alarm function is triggered with out a reason – Because there is a bent on the pressure hose
- Alarm function is triggered with out a reason – Because the parameter span in P2/P3 is to narrow. Raise the P3 level!
- The light in the display is turned off – because the fuse in the power supply has to be changed.

Remember to switch off the 230V before the AirBox III is opened.

Wiring for AirBox III



7.0 Declaration of Conformity

The manufacturer: GEOVENT A/S
Hovedgaden 86
DK-8831 Løgstrup

Authorised to compile the technical dossier:
Ole Madsen

hereby declares that:

The product: AirBox III
Models:

Date: 20/12-18

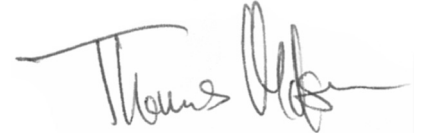
Position: Managing Director
Name: Thomas Molsen

has been manufactured in compliance with the following directives and standards:

Safety:

EN60730-1:2012 – Automatic electrical controls for household and similar use.
Part 1: General requirements.

Signature:



EMC:

EN 61000-6-1:2007 – Electromagnetic compatibility (EMC) – Part 6-1: Generic standards - Immunity for residential, commercial and light-industrial environments.

EN 61000-6-3:2007 – Electromagnetic compatibility (EMC) – Part 6-3: Generic standards. Emission standard for residential, commercial and light-industrial environments.

EN 61000-6-3/A1:2011 – Electromagnetic compatibility (EMC) – Part 6-3: Generic standards. Emission standard for residential, commercial and light-industrial environments.

EN 61000-6-3/A1/AC:2012 – Electromagnetic compatibility (EMC) – Part 6-3: Generic standards. Emission standard for residential, commercial and light-industrial environments.



RoHS: Directive 2011/65/EU

The product meets the specifications in EMC Directive 2014/30/EU, Low Voltage Directive 2014/35/EC and is CE-marked.



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