Van der Ende Group

MANUAL

Airmix model X

Extension for semi-closed greenhouses

Version: 2026-06

FOREWORD

This user manual is intended for users of the Airmix model X (hereafter referred as model X) and for technicians who install and maintain it.

The user instructions and operating instructions are combined in a single document. The manual was produced by the inventor, Van der Ende Group (hereafter referred to as VDEG).

Each chapter is numbered and, where necessary, divided into sections. The table of contents on page 3 gives an overview of the chapters and sections, with references to the page numbers. There are numbers in the whole assembly manual referring to the parts described in the pictures.

TABLE OF CONTENT

1 IDENTIFICATION

This chapter will describe the global information about the system. The target of this chapter is to give a description about the application areas for the model X and in short the global way of operating.

1.1 Global description

The Airmix model X is an extension on top of the existing horticultural ventilator Airmix model G, aimed at directly sucking air from outside the greenhouse. In the current trend of 'Plant Empowerment', solutions are being sought to reduce energy and gas bills and solutions for more targeted climate control. With the Airmix model G it is possible to dehumidify the greenhouse with the traditional windows and the space above the screen. The model X provides the additional functionality to dehumidify the greenhouse by sucking air directly from the outside and blow this into the cultivation area below the (closed) screen. This happens through a separate window. Because of the separate window, the traditional windows can stay closed and heat in the cultivation area is retained.

1.1.1 Description of the system and machine

The Airmix model X consists of the Airmix model G with a suction shaft above it on the greenhouse deck, which is equipped with a separate ventilation window and a valve to the ridge space. The window and ridge space flap are directly connected inside the unit. This creates a mixing possibility of air above the screen cloth and/or outside air while the screen cloth and traditional ventilation windows are closed. The window and the flap are opened/closed by means of the actuator on the outside of the suction duct which is located on each model X unit. The control of the Airmix model X must be controlled externally and is not part of the product.
The Airmix model G is mounted as described in the assembly manual for this product.

1.1.2 Specifications

Global information	
Type	Airmix model X*
Max. dimensions (LxBxH)	1270 x 630 x height depends on greenhouse (incl. model G)
Total weight	25 kg (excl. Airmix model G)
Window Linear actuator	
Power	2.0 W
Voltage	24 V AC 50/60 Hz. 24 V DC
Functional range	AC/DC 19.2 .. 28.8 V
Total time open-close	150 sec / 100 mm (full distance = 6,0 min)
Dust and water ingress protection	IP54
Max. Force	450 N
Power cable	1m cable 3 x 0.75 mm^2 (18 AWG) without plug
Certification	CE-mark, cULus (E108966)
Optional actuator with feedback signal	
Power	3.5 W
Voltage	24 V AC 50/60 Hz
Functional range	AC/DC 19.2 .. 28.8 V
Feedback signal	2…10Vdc
Total time open-close	150 sec / 100 mm (full distance = 6,0 min)
Dust and water ingress protection	IP54
Max. Force	450 N
Power cable	1m cable 3 x 0.75 mm^2 (18 AWG) without plug
Certification	CE-mark, cULus (E108966)
Housing	
Material	Aluminum 2 mm
Amount of openings	1 pcs. + 1 pcs. window

Table 1: Specifications Airmix model X

* The model X also includes the Airmix model G. See the manual of the Airmix model G for specifications.

1.1.3 Schematic view of the total system

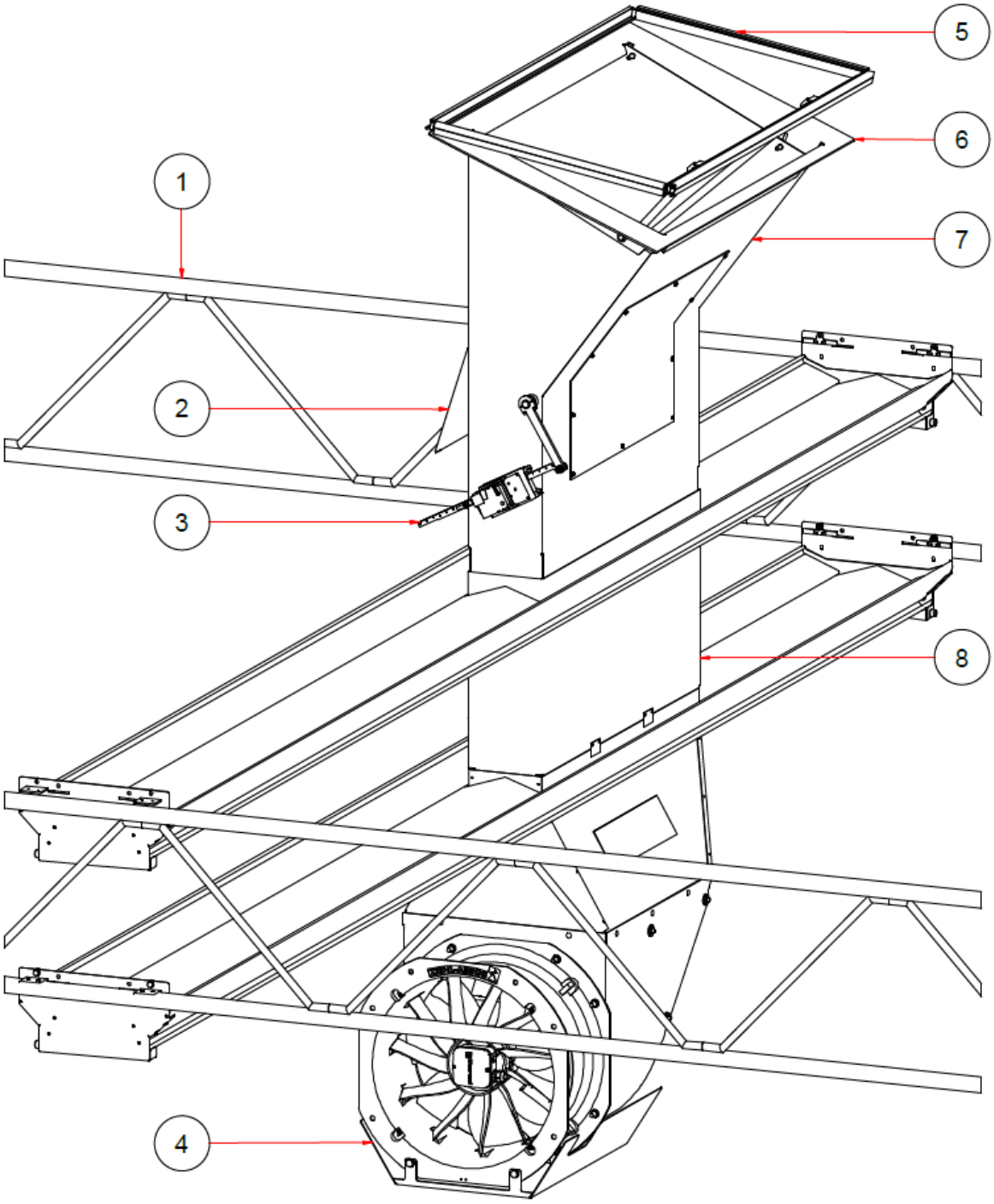


Figure 1: Schematic view Airmix model X

Nr.	Description
1	Lattice
2	Opening valve towards space above screen
3	Linear actuator
4	Airmix model G incl. mounting profiles
5	Window model X
6	Fitting plate *(size is project-based)*
7	Suction hood model X
8	Extension *(size is project-based)*

Table 2: Parts overview Airmix model X

1.2 Controls and manual adjustment

The model X has no internal control but is connected to the climate computer. Everything about the model X is controlled automatically and no form of manual control/control is required nor possible. The linear drive has the option of unlocking the drive by pressing a push button.
Note!: This push button may only be used during the installation of the model X when there is no voltage and external steering signal is present on the installation.

1.3 Use

The model X is intended for mixing cold dry air from above the screen or air from the outside of the greenhouse with warm humid air in the cultivation area in greenhouses to improve the climate distribution in a greenhouse. In addition, the Airmix can be used to create horizontal air circulation.
The model X is not intended to be used for purposes other than those described above, such as the transport of gases other than air within a temperature range of -30°C to +50°C.

1.4 Users

The Airmix model X is not used directly, it is only controlled externally by an operator. Intended users are persons of at least 18 years of age and employed by the company where the model X is installed, who have been designated by management as competent enough to operate the model X.
Unintended users are users who do not meet the above description. Unintended users are all users who, by using the Airmix, create unsafe situations or endanger themselves or others.

1.5 Media

Placing an image/comment in relation to the model X should always be discussed in advance with the producer/supplier. If this is not observed, any consequential damage can be recovered from this person/company.

1.6 Operating environment

The model X must mounted to the roof of the greenhouse at the designated position. An extra window should be located here, independently next to the traditional windows.
The minimum ambient temperature is -30°C and the maximum ambient temperature is 50°C. Persons must not be able to reach the fan without resources (such as a staircase).
The lattice truss must be in good condition to support the Airmix model G and the greenhouse roof must be in good condition to support the suction hood.

The model X is not intended to be used in an environment other than that described above. The model X is not suitable for use in an explosive atmosphere.

1.7 Guarantee conditions

The unit is guaranteed for 6 months after first use. If a claim is made under guarantee, the parts concerned must be presented to the manufacturer for assessment. The guarantee is void in the event of one or more of the following:

- Improper use
- Repeatedly ignoring the manufacturer’s or supplier’s advice
- Unauthorized repair, maintenance or use
- Use of inappropriate power supply connections
- Use of the machine in an unsuitable environment
- Intentional damage or modification of the machine

1.8 Relevant directives

The model X complies with the provisions of the following directives:

- Machinery Directive 2006/42/EC
- Low Voltage Directive 2006/95/EC
- EMC Directive 2004/108/EC

The model X is classified as a Class I device according to the Low Voltage Directive.

1.9 Residual risks

It is expected that the user/operator adheres to all the above articles, in situations which are not described, the manufacturer/supplier must be informed at all times. External connections such as the power or signal cable are the responsibility of the user/operator, VDEG is not responsible for this.

Residual risks for the Airmix model X are the risks that arise from the risk analysis and could not be covered for the CE certification. These residual risks are included in the table below. Risks resulting from the Airmix model G are not included in the table below.

Risk nr.:	Description	Risk level	Risk class
1	Risk of being squeezed by the unshielded flap in the suction hood towards the space above the screen when closing	2	A
2	Falling object hazard if parts become detached from the model X	2	A
3	There is a chance that the Airmix model X will be under voltage due to a defect	2	A

Table 3: Residual risks of the Airmix model X

2 DESCRIPTION

2.1 Function

The function of the Airmix model X is to ventilate and dehumidify with the screen closed. The model X sucks air from the space above the screen or directly from outside and blows it into the cultivation area below the screen. The system also works as a horizontal recirculation system, making it a multifunctional system. This way of working allows 'controlled' ventilation and it is possible to keep the screen closed for longer. In addition, the Airmix model X makes it possible to get outside air into the cultivation room while leaving the traditional air vents closed. The advantage of this is that under cold outside conditions no 'screen gap' needs to be drawn, which prevents a cold downdraught (unwanted air flow and temperature differences).

2.2 Working principle

The model X is mounted between the Airmix model G and the roof of the greenhouse. There is an air window on the side of the greenhouse roof, independent of the traditional air windows of a greenhouse, which can be pushed open by the drive system in the model X. The outside air intake flows via the suction hood of the model X towards the fan of the Airmix model G, which then sends the outside air directly into the cultivation room. Above the screen there are 3 possibilities to suck in air;

- 100% outside air intake → window = open / flap to the ridge space = closed
- 100% air intake from the ridge space → window = closed / flap to the ridge space = open
- A combination of both

The Airmix model X is defined as 'open' when the air window is open. When the air window is closed and the valve to the ridge space is open, the Airmix model X is defined as 'closed'.

In addition, the valves in the Airmix model G can shut off the suction from above the screen. When the valves are closed, the Airmix takes air from the cultivation room and thus works as a horizontal recirculation system.

2.3 Transport and delivery

The Airmix model X is delivered to the customer in parts. When the model X is added to an existing Model G system, the following components are supplied separately:

Part	Nr. in Figure 1
Airmix model G including mounting profiles	4
Suction hood with driveline	3 & 7
Valve towards area above the screen	2
Mounting material	-
Extension	5

Table 4: Content transport

The separate air window is installed by an external company. The roof plate required for attachment to the greenhouse roof is immediately placed in position when the window is installed.

3 SAFETY INSTRUCTIONS

This describes the safety instructions that must be followed when assembling the Airmix model X.

- Always make sure that the plug of the fan is unplugged when working on the Airmix! This prevents accidental and/or unintentional starting of the fan.
- Ensure that the external valve control signal from the climate computer is shut down. This prevents accidental and/or unintentional starting of the linear drive.
- Ensure that the fan and linear actuator are not electrically connected until assembly has been completed and the installation has been mounted.
- Manually test and adjust the window drive system using the unlocking button before connecting it electrically. This prevents damage to the window or drive system.
- When mounting both the Airmix model G and the Airmix model X, work is carried out at height. Ensure a safe working environment when working at these heights. The use of falling protection is mandatory.

The regulations below apply to the Airmix model X.

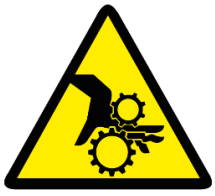
Safety symbol	Description
	Reading instructions obligated!
	Remove power plug before working on the system!
	Automatic starting machine!
	Electric voltage present!
	Danger of falling!
	Rotating parts!

Table 5: Safety instructions for working with the Airmix model X

4 INSTALLATION

In this chapter is described how the model X must be installed. Before starting work on the installation, the entire manual must be read.

4.1 Mounting package contents

Below is the list of what you need for one Airmix model X. This only contains the parts for the suction hood with the driveline.

Quantity	Description	Content
Airmix model G		
1 pcs.	Airmix model G (4)	- See the manual of the Airmix model G for the content of this product
Airmix model X		
1 pcs.	Suction hood (7)	- housing including drive system
1 pcs.	Valve towards roof peak (2)	- 1 pcs. Valve towards roof peak - 1 pcs. Window bracket (incl. bolt m6x50 + self-locking nut m6) - 2 pcs. Hexagonal bolt m6x20 - 2 pcs. Self-locking nut m6 - 4 pcs. Washer m6
2 pcs.	Window push rod	
1 pcs.	Mounting set	- 2 pcs. Cotter pins for push/pull tube - 2 pcs. Hexagonal bolt m6x20 - 1 pcs. Hexagonal bolt m6x30 - 5 pcs. Hexagonal bolt m8x35 - 3 pcs. Washer m6 - 2 pcs. Washer m8 - 2 pcs. spring washer m8 - 2 pcs. Fender washer m8 - 2 pcs. self-locking nut m6 - 1 pcs. self-locking nut m8 - 6 pcs. Nylon washer Ø6,4 x 18 x 2,0
1 pcs.	Extension (8)	Customer-specific component. The height of the extension depends on type of greenhouse where the model X is installed.
Optional		
1 pcs.	Feedback signal window*	- 1 pcs. Belimo linear drive; output 2…10Vdc

Table 6: content of mounting package for the Airmix model X

*the feedback signal for the Airmix model G is a different option for the product itself.

4.2 Installation requirements

- Choose a suitable place;
  - Observe the installation drawing supplied by VDEG and/or your installer.
  - Make sure there are no objects in the way;
  - Make sure that no objects can get in front of the inlets and outlets of the Airmix;
  - Make sure that people cannot reach the fan or drives without recourses (such as stairs);
  - Check whether the lattice is in good condition;
  - Check whether the construction of the greenhouse roof is in good condition;
  - Check whether there is an electrical connection within 5 meters;

- Install the model X suction hood onto the roof of the greenhouse **before** installing the Airmix model G

- Make sure the right recourses and tools are present (per person);

Quantity	Description
2	Open-ended wrech 10 mm
2	Open-ended wrech 13 mm
1	Hex key 4 mm
1	Hex key 2.5 mm

Table 7: Required tools for mounting Airmix model X

4.3 Control delivery

Before starting the assembly of the Airmix model X, it must be checked whether all parts have been delivered/are present. In chapter 4.1 an overview is shown of which parts must be present to successfully install the Airmix model X.
Note: Chapter 4.1 describes the parts for only one model X system.

4.4 Installation of the Airmix model X

This chapter describes the steps to be taken when installing Airmix model X. The model X is an extension of the Airmix model G. For the assembly of the Airmix model G, please refer to the manual of this product. Always install the Airmix model X in consultation with the screen and window installer.

Note: First mount the suction duct of the model X to the greenhouse roof. When it hangs in the right position, the Airmix model G can be mounted directly below it.

Table 7 lists all the tools needed to install the entire model X. For each step, it is specifically indicated what the minimum required tools are and which parts and fasteners are required for that assembly step.

4.4.1 Installation of the suction hood to the window

The steps described in this chapter must be followed to mount the suction hood to the window. The following tools are minimally required for this;

Quantity	Description
1	Open-ended wrench 13 mm

Table 8: Required tools for installation to the roof plate

This step must be performed by at least 2 people. Both persons must be able to reach the ridge of the greenhouse in order to attach the suction hood to it. Ensure a safe working environment at all times!

The parts in Table 9 are required for this assembly step. For mounting see Figure 2 on the next page.

Before starting the assembly steps below, the fitting plate, together with the window, must already be placed in the greenhouse roof. The roof plate is indicated by number 1 in Figure 2.

Quantity	Description	Nr. in Figure 2	Article nr. VDEG
2	Window push rod	2	55022360
1	Suction hood	3	55015720
1	Roof plate	1	-
4	Stainless steel hexagonal bolt m8x35	5	57005960
2	Stainless steel washer m8	4	57001140
2	Stainless steel spring washer m8	7	57002140
2	Stainless steel fender washer m8	6	57000140

Table 9: Required parts for installation to the roof plate

- First attach the window push rods (2) to the appropriate brackets in the lower side of the window frame. Use the supplied cotter pins for this.
- Push the locking pins as far as possible so they can't slide out of the brackets (see figure below). When there are cotter pins used they can be bent open using a flat screwdriver so that the assembly is secured.
- Bring the suction hood (3) to the ridge of the greenhouse and mount it to the appropriate holes on the roof plate (1). Make sure that the window push rods (2) are located on the inside of the suction hood.
- Use one hexagonal bolt m8x35 (5) and one washer m8 (4) at the top hole. Screw these into the m8 blind rivet nuts of the suction hood. See Figure 2A for this. Perform this for both sides of the suction hood.
- Use one hexagonal bolt m8x35 (5), one fender washer m8 (6) and one spring washer m8 (7) for the slotted hole. See Figure 2A for this. Perform this for both sides of the suction hood.
- Use the slotted hole to adjust the suction hood. Make sure the suction hood hangs straight down. If necessary, use a spirit level to adjust this.

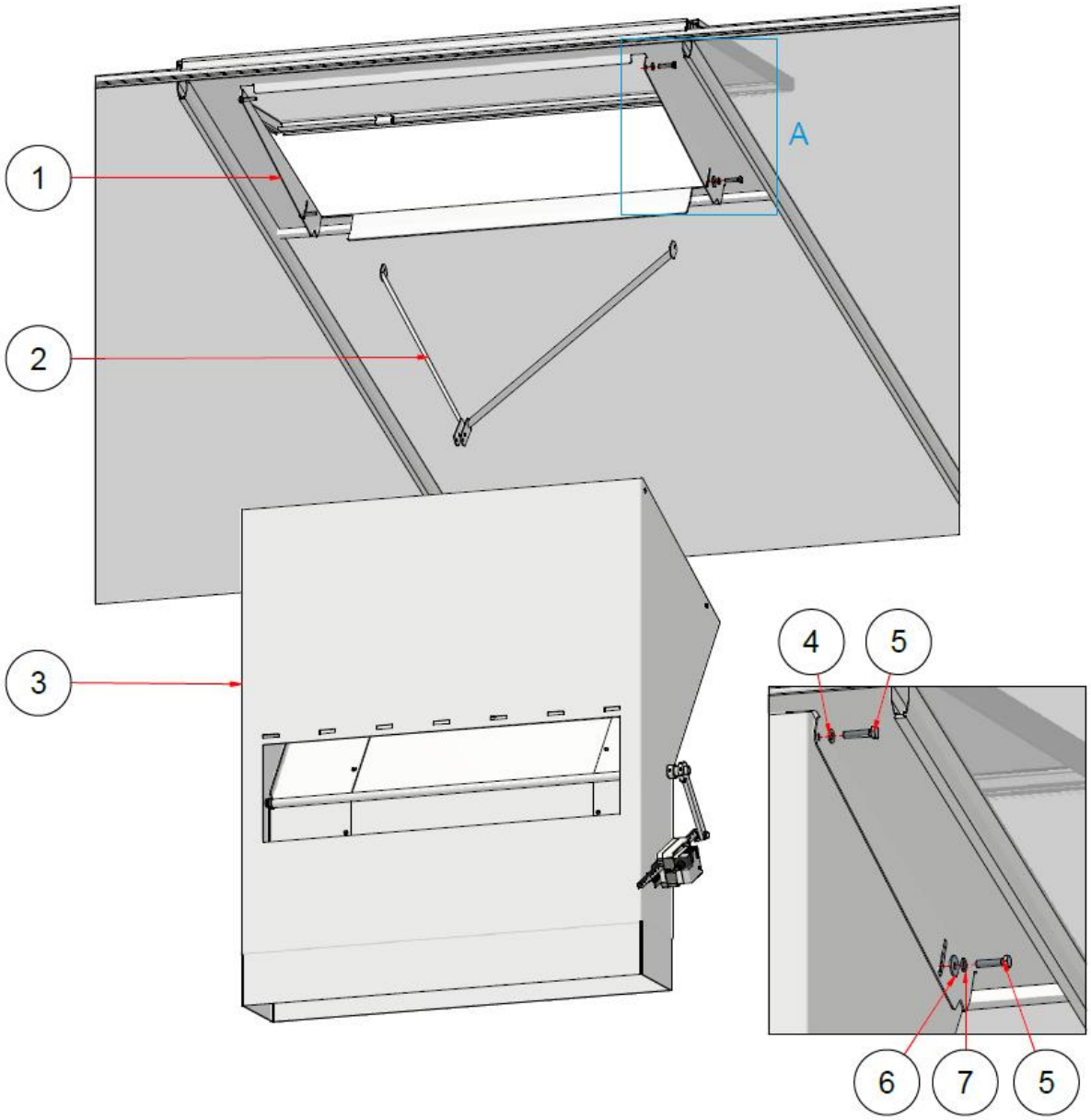


Figure 2: Airmix model X installation to the roof

4.4.2 Installation and adjusting the driveline

The following tools and parts are required for mounting and adjusting the window drive system and the flap to the space above the screen.

Quantity	Description
1	Open-ended wrench 8 mm
2	Open-ended wrench 10 mm
2	Open-ended wrench 13 mm
1	Hex key 4 mm
1	Hex key 2.5 mm

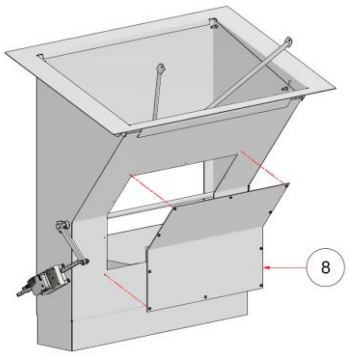
Table 10: Required tools for adjusting the driveline

Quantity	Description	Nr. in Figure 3	Article nr. VDEG
1	Ridge space flap	22	-
1	Hexagonal bolt m6x40	10	57005650
4	Nylon washer Ø6,4 x 18 x 2	9	56024170
1	Self-locking nut m6	17	57005130

Table 11: Required parts for adjusting the driveline

Attention!: The unlocking button on the actuator may only be pressed when the window is closed. When the release button is used while the air window is open, the weight of the air window will cause the motor to run in the opposite direction very quickly.
Watch out for the gear rack and motor handle that pass each other.

- Make sure that the inspection hatch (8) has been removed during this assembly step. This can be done by loosening the M5 bolts using an 8mm wrench or battery tool.
- Detach the clamping part (19) of the actuator lever by loosening bolts (16) and (20), until the actuator lever rotates loosely around the valve shaft (11), using an hex key 4 and 2.5 mm.
- Attach the window push rods (2) to the drive handle on the inside of the suction hood. Use one hexagonal bolt m6x40 (10), one self-locking nut m6 (17), six nylon washers Ø6.4x18x2 (9)
- When the window push rods (2) have been mounted on the drive handle, the clamping part (19) on the valve shaft (11) can be tightened again.
- Hang the flap for the ridge space (24) with lips at the top in the appropriate slots of the suction hood as shown in the picture on page 17.
- Loosen the m6x40 (10) bolts in the adjusting levers (12) partially (not completely out!) so that the adjusting lever (12) and the push-pull rod (21) can slide apart from each other.
- Loosen the m6x50 construction bolt in the bracket (15) and mount the push-pull rods (21) on it. Then retighten the m6x50 construction bolt in the bracket (12).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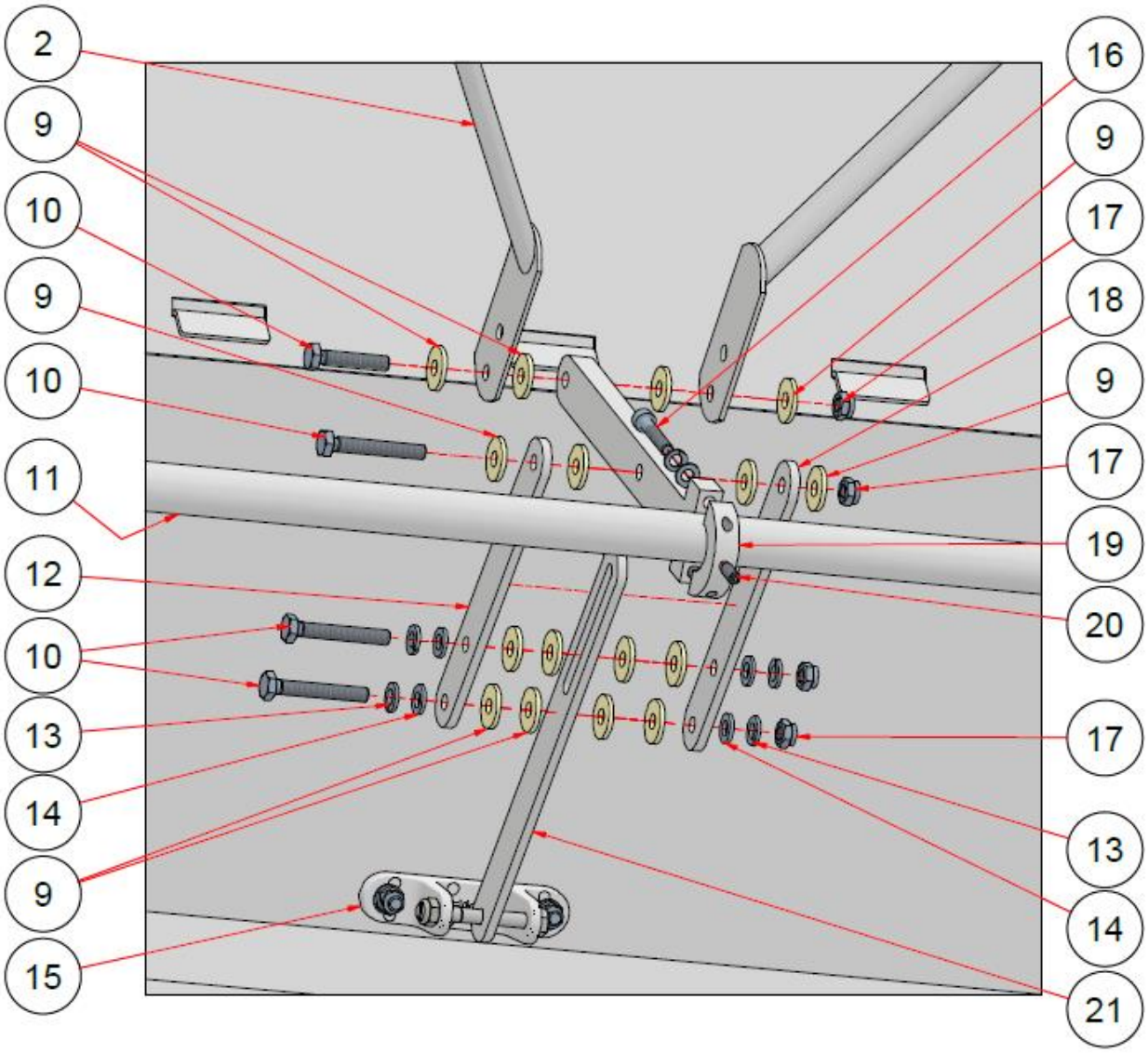
- Follow the steps below to adjust the drive system.
    - Ensure that the motor handle (28) is connected to the linear actuator (29)
    - Loosen the clamping part (27) of the motor handle (28) so it is no longer clamped (Not loosened completely!) by loosening bolts (16) and (20).
    - Put the linear actuator (29) in its highest position by pressing the unlocking button on the linear actuator and make sure the window is closed.
    - Tighten the clamping part (27) of the motor lever (28) again.
    - Put the linear actuator (29) to the lowest position by pressing the manual control button on the linear actuator.
      Please note: if the installation has been carried out correctly up to here, the window will open when the linear actuator is put in its highest position.
    - Slide the push-pull rods (21) and adjusting levers (12) so that the valve to the ridge space (24) is fully closed.
    - Retighten the m6x40 (10) bolts so that the handles (12 + 21) clamp and form one unit.

- Test the drive system manually using the manual control button on the linear actuator. While testing, check the mechanical stops in the gear rack of the linear actuator. The following should work:
    - Linear actuator in the lowest position = window open and flap to the ridge space closed.
    - Linear actuator in the highest position = window closed and flap to the ridge space open.



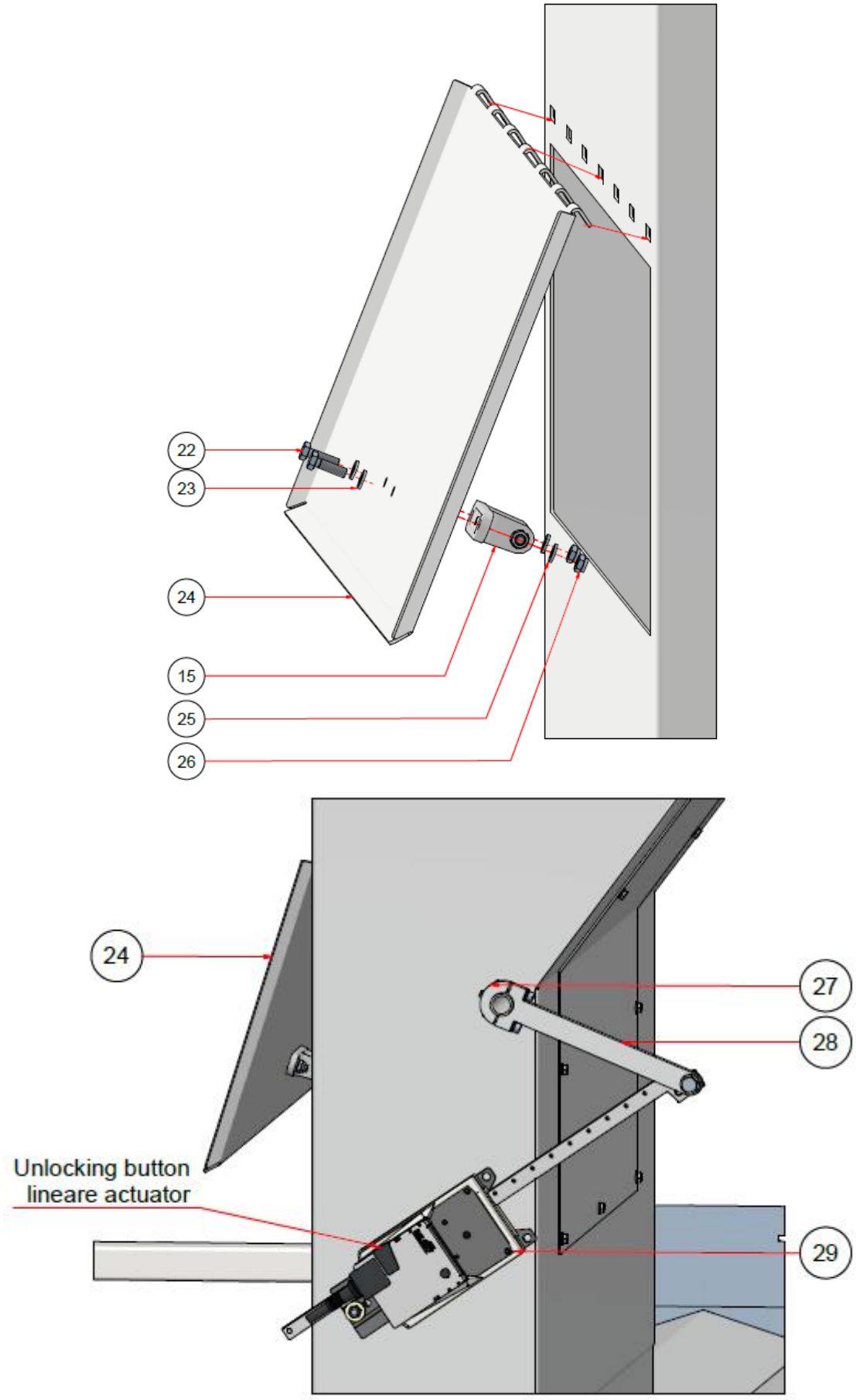


Figure 3: Installation and adjusting of the driveline

4.4.3 Installation of the extension between suction hood and Airmix model G

The connection between the Airmix model G and the suction duct is realized by the extension duct. At the bottom, the extension tube is undersized compared to the Airmix housing. The height depends on the ridge height of the greenhouse in which the Airmix model X is mounted.

Quantity	Description
1	Installation manual Airmix model G

Table 12: Required tools for the extension between suction hood and Airmix model G

Quantity	Description	Nr. in Figure 4	Article nr. VDEG
1	Extension	31	72005150

Table 13: Required parts for the extension between suction hood and Airmix model G

To mount the Airmix model G under the Airmix model X, work from top to bottom. See Figure 4 for mounting the model G under the suction duct.

- Make sure that the steps from chapter 4.4.1 have been carried out correctly and that the suction duct (3) is attached to the greenhouse roof;
- In case that a second screen is present, a second set of mounting profiles (30) must be placed on the top profile of the grating. To do this, follow the steps in the manual of the Airmix model G;
- Slide the extension tube (31) between the mounting profiles of the second screen (30) and over the lower part of the suction duct of the model X (3). Make sure that the extension tube (31) cannot fall by **temporarily** attaching it to the mounting profiles or suction tube;
- Place the mounting profiles and end plates for the model G (32) so that the extension tube (31) is positioned between the mounting profiles of the first screen. Read the manual of the Airmix model G before mounting the mounting profiles to the lattice truss;
- Completely assemble the housing of the Airmix model G (32) on the floor;
- Bring the Airmix model G (32) to the lattice truss and mount it as described in the manual. Make sure the extension tube (31) fits into the top of the Airmix model G (32);
- Loosen the temporary attachment of the extension tube (31) and let the extension tube rest in the Airmix model G (32);
- Check that everything is properly attached as described in the manual of both the Airmix model G and Airmix model X. Also check whether all parts fit neatly together.

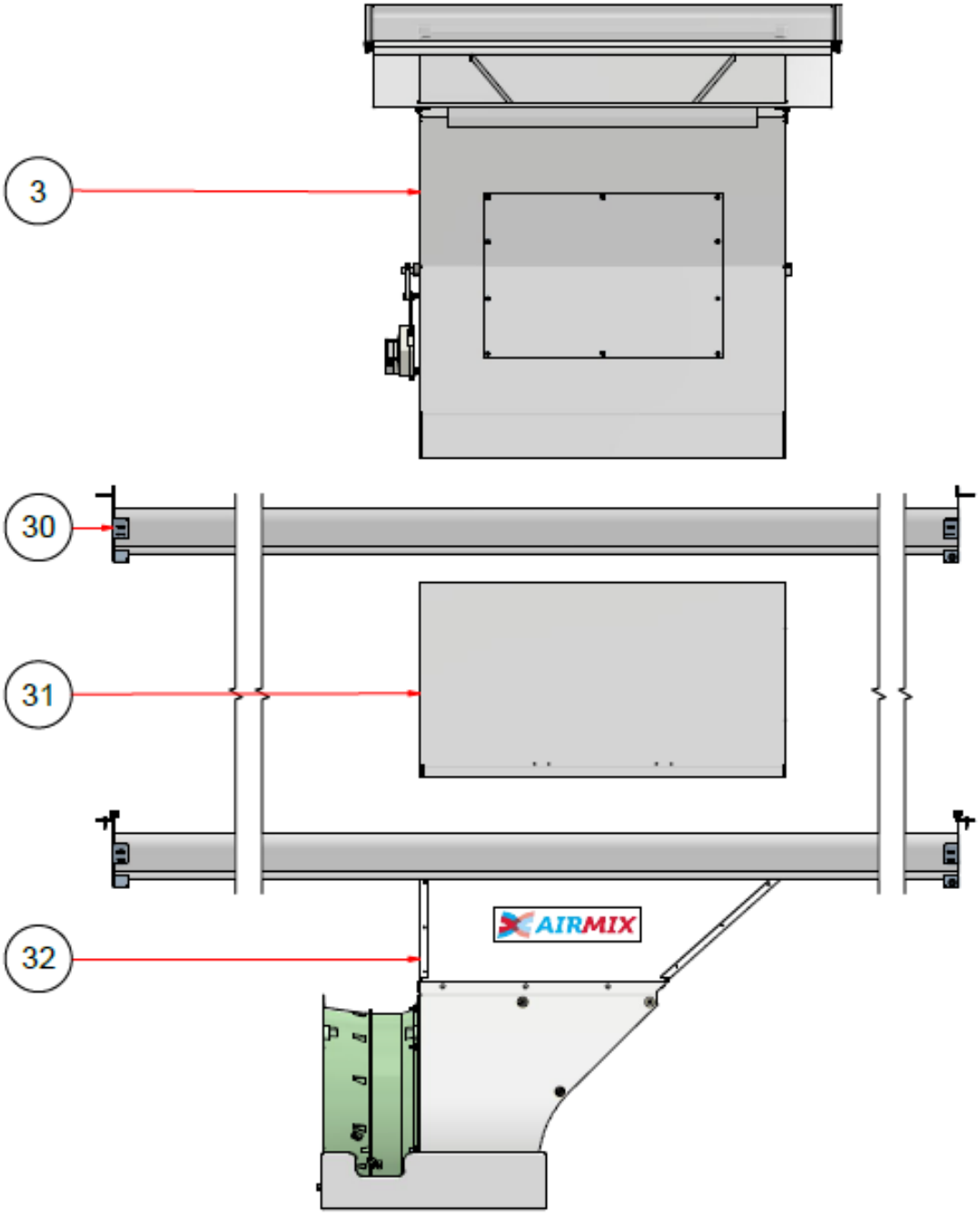


Figure 4: Installing the Airmix model G and the extension to the suction hood

5 OPERATION/USING FOR THE FIRST TIME

Operating the Airmix model X means that the fan, linear actuator and valve position indicator must be connected. The connection diagram for the fan is described and shown in the installation manual for the Airmix model G. The linear actuator and valve position indicator are shown below.

5.1 Lineair actuator

The linear actuator (Figure 5) for the window drive is controlled via the climate computer with a 3-point control. A cable with four wires comes out of the drive. Wire number 1 is Ground and number 2 is constantly under voltage to provide feedback. The signal for opening and closing the valve drive (24 VAC) must be received on wire number 3. This is switched by means of contacts A and B from Figure 6. Please note, a diode must always be placed behind contact B. The diode to be used is specified in Table 14. The way in which contacts A and B are switched will determine how the actuator will operate, see the diagram in Figure 6.

From wire number 5, the actuator sends a 2…10Vdc signal as position feedback.

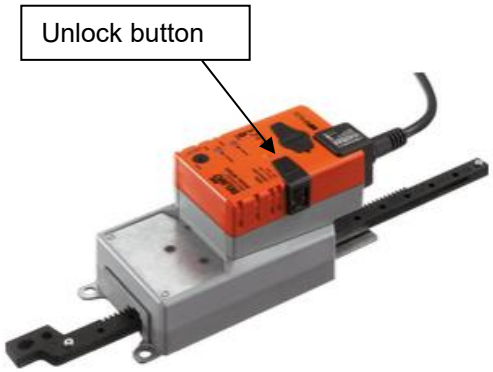


Figure 5: Linear actuator

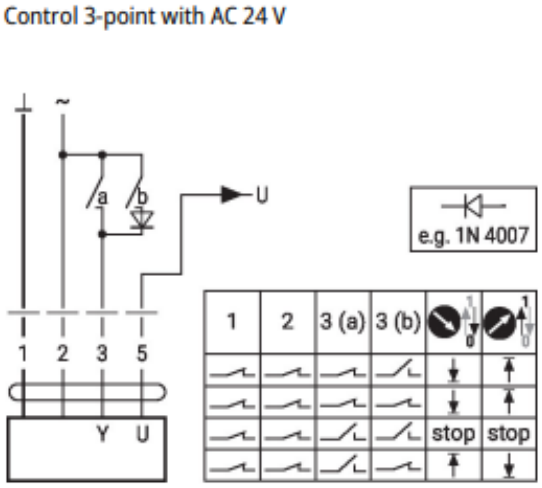


Figure 6: Connecting diagram linear actuator

Note! The actuator must be controlled by a 24V AC signal. With a 24V DC signal, the actuator will not function correctly.

A diode must be used in the connection of the actuator. The following is recommended by the supplier:

Type	Art. nr. VDEG
Diode 1N4007	11029240

Table 14: Recommended diode for connecting the actuator

The mechanical stops are already in the correct position in the rack upon delivery. In the event of maintenance/adjustment or other work, the following positions of mechanical stops must be observed. One in the bottom hole (left) and the top mechanical stop in the fourth hole from the top (right).

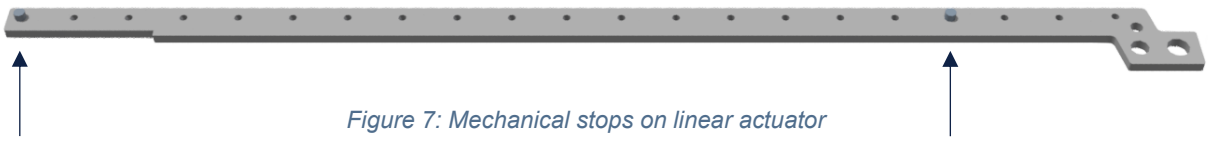


Figure 7: Mechanical stops on linear actuator

6 MAINTENANCE

When servicing the Airmix, the fan must be unplugged and the drive disconnected to prevent unexpected and unwanted starting of the fan and window/valve drive.

6.1 Control and maintenance

Make sure that there **is no** voltage on the system and that it is protected against re-activation before carrying out any maintenance work

For the maintenance of the entire unit, the maintenance work of the Airmix model G must also be carried out. To do this, take a look at the manual of the Airmix model G.

The following maintenance points on the Airmix model X must be continuously monitored:

- Keep the space in which the valve to the ridge space opens free from foreign bodies or contaminants;
- Keep the gear rack of the valve actuator free from dirt and objects that could cause the actuator to get jammed.

Check the following points once every ± 3 months:

- Check the mechanical stops on the linear actuator (do this by going through a complete open/close cycle)
- Check whether the linear actuator and the further drive system are properly secured.
- Check whether the pivot points still have enough freedom to move relative to each other.

6.2 Maintenance report

Maintenance performed should be noted what work has been done on the model X. Use the last page or a self-created form for this. The information below should at least come back to this.

- Date
- Observation/problem in the installation
- (maintenance) work performed

If the installer or user cannot carry out maintenance or repairs because the defect in the machine is of such a great magnitude, please contact the supplier.

7 MALFUNCTIONING

This chapter describes the possible malfunction and the associated cause and solutions. Make sure that all chapters in this manual are observed when working on the machine to prevent unsafe situations.

If the drive of the Airmix model X is jammed without hitting a mechanical stop, the window is jammed or the drive is defective. By using the unlock button on the linear actuator (see Figure 5) it can be tested whether the window still opens. If the window still opens and the rod mechanism is still OK, the linear actuator is defective. In the event that the window no longer opens, it is necessary to look for the problem that causes the window to block.

For other malfunctions of the system, the supplier of the product should be contacted.

8 DISASSEMBLY

Check that the plug is disconnected from the power supply and the damper actuator is disconnected, this prevents unintentional and unwanted starting of the fan and opening or closing of the dampers. Provide a safe workplace.

9 EU DECLARATION OF CONFORMITY

(in accordance with Annex V Attachment IV part A of the Machinery regulation (EU) 2023/1230)

We,

Van der Ende Pompen
Aartsdijkweg 23
2676 LE Maasdijk
Netherlands

Hereby declare under our sole responsibility that the machine:

Airmix model X

To which this Declaration relates, is in conformity with the provisions of the following Directives:

Machinery Regulation (EU)	2023/1230
Low voltage directive	2014/35/EU
Electromagnetic compatibility directive	2014/30/EU

And (where applicable) is in conformity with the following standards or other normative documents:

EN ISO 12100, EN 60204-1, EN 61000-6-2, EN 61000-6-4

Netherlands
Maasdijk
21-05-2026

L. van der Ende

ATTACHMENTS

- CE declaration lineair gear rack drive
- CE declaration Fan

BELIMO

EU-KONFORMITÄTSERKLÄRUNG

Wir **BELIMO Automation AG**
(Name des Herstellers)

Brunnenbachstrasse 1
8340 Hinwil, Schweiz
(Anschrift)

erklären in alleiniger Verantwortung, dass das Produkt

Elektrischer Stellantrieb

SH24A300

auf welches sich diese Erklärung bezieht, mit der / den folgenden Norm(en) oder normativen Dokument(en) übereinstimmt.

EN 60730-1:00+ A1:04+ A12:03+ A13:04+ A14:05
+ A15:07+ A16:07+ A2:08,
EN 60730-2-14:97+ A1:01+ A11:05+ A2:08,
EN 50121-3-2:15 (railway),
EN 61000-6-2:05 (imm ind),
EN 61000-6-3:07+ A1:11 (em hh)

gemäss den Bestimmungen der Richtlinie(n)

Bis 19.04.2016	**Ab 20.04.2016**	
2006/95/EG	**2014/35/EU**	**NSR**
2004/108/EG	**2014/30/EU**	**EMV**
2011/65/EG	**2011/65/EU**	**RoHS2**

Hinwil, 09.04.2016 **Curdin Stäheli**
(Ort und Datum) (Name und Unterschrift)
Head of Division Development

Dieses Original darf nicht kopiert werden, da es dem Änderungsdienst unterliegt

EU DECLARATION OF CONFORMITY

We **BELIMO Automation Ltd**
(manufacturer)

Brunnenbachstrasse 1
8340 Hinwil, Switzerland
(adress)

declare under our sole responsibility that the product

Electric actuator

SH24A300

to which this declaration relates is in conformity with the following standard(s) or other normative document(s).

EN 60730-1:00+ A1:04+ A12:03+ A13:04+ A14:05
+ A15:07+ A16:07+ A2:08,
EN 60730-2-14:97+ A1:01+ A11:05+ A2:08,
EN 50121-3-2:15 (railway),
EN 61000-6-2:05 (imm ind),
EN 61000-6-3:07+ A1:11 (em hh)

following the provisions of directive(s)

Until 19.04.2016	**From 20.04.2016**	
2006/95/EC	**2014/35/EU**	**LVD**
2004/108/EC	**2014/30/EU**	**EMC**
2011/65/EC	**2011/65/EU**	**RoHS2**

Hinwil, 09.04.2016 **Curdin Stäheli**
(Place and date of issue) (name and signature)
Head of Division Development

This original may not be copied, as subject to technical changes

DÉCLARATION DE CONFORMITÉ UE

Nous **BELIMO Automation SA**
(nom du fournisseur)

Brunnenbachstrasse 1
8340 Hinwil, Suisse
(adresse)

déclarons sous notre seule responsabilité que le produit

Actionneur électrique

SH24A300

auquel se réfère cette déclaration est conforme à la (aux) norme(s) ou autre(s) document(s) normatif(s).

EN 60730-1:00+ A1:04+ A12:03+ A13:04+ A14:05
+ A15:07+ A16:07+ A2:08,
EN 60730-2-14:97+ A1:01+ A11:05+ A2:08,
EN 50121-3-2:15 (railway),
EN 61000-6-2:05 (imm ind),
EN 61000-6-3:07+ A1:11 (em hh)

conformément aux dispositions de(s) directive(s)

Jusque 19.04.2016		**De 20.04.2016**
2006/95/CE	**2014/35/UE**	**DBT**
2004/108/CE	**2014/30/UE**	**CEM**
2011/65/CE	**2011/65/UE**	**RoHS2**

Hinwil, 09.04.2016 **Curdin Stäheli**
(Lieu et date) (nom et signature)
Head of Division Development

Cet original ne doit pas être copié, sujet de changement technique

EC-Declaration of conformity

00298311-GB

as defined by the EC Low Voltage Directive 2006/95/EC, the EMC guideline 2004/108/EC, as well as ErP guideline 2009/125/EG.

The type of machinery:

- External rotor motor MK.., MW..
- Axial fan FA.., FB.., FC.., FE.., FF.., FS.., FT.., FH.., FL.., FN.., VR.., VN.., ZC.., ZF.., ZN..
- Centrifugal fan RA.., RD.., RE.., RF.., RG.., RH.., RK.., RM.., RR.., RZ.., GR.., ER..

Motor type:

- Asynchronous internal or external rotor motor with integrated frequency inverter for EDP system
- Electronically commutated internal or external rotor motor with integrated EC controller for EDP system

is developed, designed and manufactured in accordance with the EC Directives 2006/95/EC, 2004/108/EC and 2009/125/EC, on the own responsibility of

ZIEHL-ABEGG SE
Heinz-Ziehl-Strasse
D-74653 Kuenzelsau

The following standards are applied:

EN 60034-1:2010+Cor.:2010, EN 60204-1:2006, EN 60529:1991 + A1:2000, EN 61000-6-4:2007, EN 61000-6-2:2005

Compliance with the ErP Directive 2009/125/EC does not refer to external rotor motors MK.., MW..

Compliance with the EMC Directive 2004/108/EEC only applies to this product if it is connected according to the operating instructions. If this product is integrated in a system or complemented and operated with other components (e.g., switching and control equipment), the manufacturer of or company operating the overall plant is responsible for compliance with the EMC Directive 2004/108/EEC.

The complete technical documentation is available.

22.11.2013

Dr. W. Angelis - Technical Director Air Movement Division

i.V. W. Angelis

ZA92-GB-12/13 Index 003

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english

ZIEHL-ABEGG

NOTES

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