Instruction for Installation and Commissioning



VENT RADIO SYSTEM

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Warning symbols and safety symbols in this instruction:

The symbols used in the instruction must be observed and have the following meaning:



Failure to comply with the warning notes results in irreversible injuries or death.



Failure to comply with the warning notes can result in irreversible injuries or death.



Failure to comply with the warning notes can result in minor or moderate (reversible) injuries.



Failure to comply with the warning notes can lead to damage to property.



Special notes

for an optimum installation.



Caution / Warning

Danger due to electrical current.



Attention / Warning

Risk of damage to / destruction of Control Unit, drives and / or windows.

Target group

These instructions are intended for personnel trained in electrical engineering and skilled operators of systems for natural smoke ventilation (NRA / RWA) (natural smoke exhaust system / smoke and heat exhaust system) and natural ventilation via windows, who are knowledgeable of operating modes and remaining risks of the system.



This device is not intended for use by persons (including children) with physical, sensory or mental limitations or lacking experience and / or knowledge.

Intended use

Area of application / Scope of application

This control device is intended for powering and controlling electromotive operated windows in facade and roof areas. The main task of this product is to ensure that fresh air is supplied for natural ventilation of the building through the electric motor-operated windows.

The operation is to be used as a supplement to an existing SHEV system or as a stand-alone ventilation system.

Intended use according to the Declaration of Conformity

The control device is intended for stationary installation and electrical connection as part of a building.

In accordance with the attached Declaration of Conformity the control device, in combination with electromotive drives from **AUMÜLLER**, is released for its proper use at a power-operated window:

- Application for natural ventilation
 - with an installation height of the drive and the bottom side of sash of at least 2,5 m above the floor, or
 - with an opening width at the HSK (main closing edge) of the driven part of < 200 mm by a simultaneous speed of < 15 mm/s at the HSK in closing direction.

By connecting the window drives with a control device and their operation the builder of the complete system becomes the manufacturer of the power-operated window! If necessary, it is required to perform a risk assessment of the complete system in accordance with the Machinery Directive 2006/42/EG when the utilization or operation of the control device or the connected window drives deviate from their intended use!

We recommend using exclusively system components by **AUMÜLLER**, because their compatibility is carefully checked in the factory. **AUMÜLLER** shall not assume liability for the system-compatible functioning of third party components. Applications and connections other than explicitly described in these instructions require the express written consent of **AUMÜLLER**. Utilization of applications and components not expressly authorised by **AUMÜLLER** are considered as unintended use even if their perfect functioning is proven at commissioning (e.g. approval under building law).

Note

Note

Safety instructions



It is important to follow these instructions for the safety of persons. These instructions must be kept in a safe place for the entire service life of the products.

Area of application

The control device must be used only for its intended purpose. For additional applications, consult the manufacturer or its authorised dealer.

Installation

These instructions are intended for expert and safetyconscious electricians and / or qualified personnel familiar with the electrical and mechanical installation of drives and control systems.

Mounting material

The required mounting material must be modified to fit the occurring load.

Routing cables and electrical connection

Electrical lines and connections may be routed or installed only by approved specialist contractors. Never operate drives, Control Units, operating elements and sensors at operating voltages and connections contrary to the specifications of the manufacturer.

Note

The planning and calculation of the wiring system is the responsibility of the builder or its agent or the authorised builder and must be performed according to the statutory provisions.

All relevant instructions must be observed for the installation, specifically:

- VDE 0100 Setting up high-voltage systems up to 1000 V
- VDE 0815 Wiring cables
- Specimen Guideline on Conduits German designation (MLAR).



The power line on-site must be secured separately and provided all poles separators. After opening of the system housing voltage carrying parts are exposed. The system must be separated from the power supply and accumulator voltage before each intervention in the Control Unit of the system.

The types of cable, cable lengths and cross-sections must be selected in accordance with the manufacturer's technical data. If necessary, the cable types must be coordinated with the competent local authorities and energy supply companies. Low-voltage lines (24 V DC) must be routed separate from the high-voltage lines. Flexible cables may not be flush-mounted. Freely suspended cables must be equipped with strain reliefs.



Cables must be laid such way that they cannot be sheared off, twisted or bent during operation. It is recommended to perform an insulation measurement of the system's line network and to document this.

Clamping points must be checked for tightness of threaded connections and cable ends. Access to junction boxes, clamping points and external drive control systems must be ensured for maintenance work.

Commissioning, operation and maintenance

After the installation and after each modification in the set up all functions must be checked with a trial run. After the installation of the system is completed the end-user must be introduced to all important operating steps. If necessary, he must be advised of all remaining risks / dangers.

The end-user must be instructed in intended use of the drives and, if necessary, the safety instructions. The end-user must be specifically instructed that no additional forces, except for the pressure and tension in the opening and closing direction of the casement, may be applied to the spindle, chain or lever of the drive.

Note

Post warning signs!



Before working on the system, it must be completely disconnected from the power supply and emergency power supply (e.g. accumulators) and secured against being switched on again accidentally. While working in the Control Unit the workplace must be secured to prevent unauthorised access. You must ensure that unauthorised personnel are unable to open the Control Unit.

Replacement parts

System components are to be replaced only with spare parts from the same manufacturer. Liability, warranty and customer service are void if third-party parts are used. Only original spare parts from the manufacturer are to be used for expansions.

Ambient conditions

The product may not be subjected to impacts or falls, or to vibrations, moisture, aggressive vapours or other harmful environments, unless the manufacturer has released it for one or more of these environmental conditions.

Operation:

Ambient temperature: -5 °C ... +40°C Relative humidity: < 90% up to 20°C;

< 50% up to 40°C;

no formation of condensation

• Transport / Storage:

Storage temperature: 0°C ... +30°C

Relative humidity: < 60%

Accident prevention regulations and employer's liability insurance guidelines

For work on or in a building or building part the provisions and instructions of the respective accident prevention regulations (UVV and employer's liability insurance guidelines (BGR /ASR) must be observed and obeyed.

Declaration of Conformity

The control device is manufactured and inspected for its intended use in accordance with the European guidelines. The relevant Declaration of Conformity is at hand. If the use or operation of the control device or the connected window drives deviate from this a risk assessment must be performed for the complete powered window system and a Declaration of Conformity according to Machinery Directive 2006/42/EG issued as well as a CE labeling obtained.

Guidelines and Standards

It is essential that the most recent versions of countryspecific laws, regulations, provisions and standards be observed during installation and for electrical connections.

These are for instance:

State building code with special construction regulations such as:

- Industrial construction guideline

Venue regulations, etc.

MLAR Sample Guideline on Conduits German

designation

Provisions of the fire protection authorities TAB (technical connection conditions) for Utility companies German Regulations for Occupational Insurance Schemes, such as:

- ASR A1.6 and 1.7 (substitute for BGR 232)

Additional standards and guidelines, such as:

EN 60335-2-103 Safety of household and similar elec-

trical appliances

EN 60730-1 Automatic electrical controls **EN 12101-10 / prEN 12101-9** (ISO 21927-9/10)

l **12101-9** (ISO 21927-9/10) Smoke and heat control systems

DIN 4102-12 Functional integrity of electric cable

systems

VDE 0100 Installation of high-voltage systems up

to 1000 V

VDE 0298 Use of cables

VDE 0815 Wiring cables (for telecommunication

and data processing systems)

VDE 0833 Alarm systems

VdS-Guidelines: 2593, 2581, 2580, 2592 Accident prevention regulations, in particular:

- VBG 1 "General rules" and

- VBG 4 "Electrical systems and equipment".

For placing on the market, installation and operation outside Germany, the relevant national laws, regulations, standards and safety provisions apply.

The contractor is responsible for proper installation or operation and the issue of a Declaration of Conformity according to European guidelines.

1.) Data sheet

VRS Click



Part.-No.: 660200

Application: The **VRS Click** is used for radio communication between

AUMÜLLER drives and VRS Remote.

Operating voltage: 24V DC +/- 20%, (max. 2 Vss)

Connector solution: AUMÜLLER-Click

Frequency band: 434 MHz, Frequency hopping

Dimensions (LxWxH): 40 x 26 x 15 mm

Control type: S12-drives with **Aumüller-Click**

Protection rating (EN 60529): IP 40 Power consumption: <12 mA

VRS Remote



Part.-No.: 660201

Application: The **VRS Remote** with LED and 4 seasaw-switches, is used to

control the drives with VRS Click.

Power supply: 2x AA batteries

Protection rating: IP22

Frequency band: 434 MHz, FFrequency hopping

Dimensions (LxWxH): 144 x 41 x 18 mm

VRS RainSens



Part.-No.: 660202 - 24 V DC

660203 - 230 V AC

Application: The **VRS RainSens** is used to report rain to an evaluation unit.

It is integrated into the system via radio.

Dimensions (LxWxH): 80 x 80 x 57 mm (without PG screw connection)

Weight: 250 g
Material: Polycarbonat
Colour: RAL 7001

Variant 24 Volt DC: Radio or switching contact

External energy supply: 24 V DC +/- 10 %

Power consumption: 4 Watt

Variant 230 Volt AC: Radio or switching contact

External energy supply: 110 - 230 Volt AC

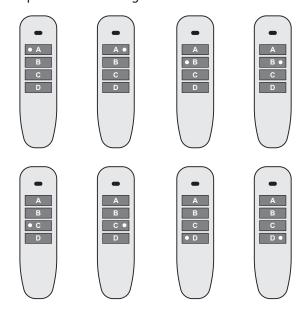
Power consumption: 5 Watt

Fuse: 200 mA (permanently installed)
Operation: Only on residual current circuit breaker

2.) General notes

Operation VRS Remote

- Short button press and normal button press: Pressure duration shorter than 2 seconds
- Long button press:
 Pressure duration longer than 3 seconds
- Normal button:
 Operate the left or right side of a seesaw-switch

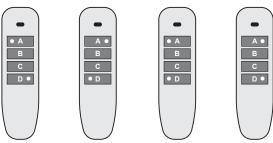


• **Single seesaw-switch**: operate the left and right side of a seesaw-switch simultaneously.



 Multiple seesaw-switch: simultaneous operation of two different seesaw switches.

Variant A: left-right or right-left Variant B: left-left or right-right



 Enter the CODE-ID by normal button or single seesaw-switch

Connecting the VRS Click

■ Before connecting the VRS Click, make sure, that the **AUMÜLLER** drive is correctly installed and supplied with power.



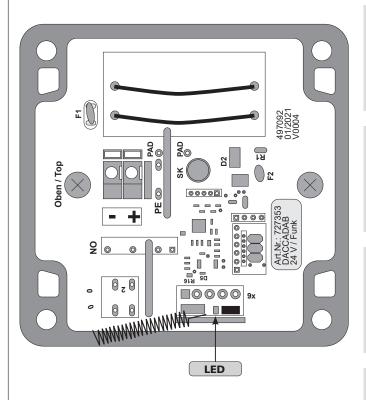
Only suitable for **Aumüller** S12-drives with "Integrated plug solution".

Nоте

It is advisable to note the CODE ID on the VRS Click, in case of the installed VRS Click has to be reconfigured - without having to dismantle the **AUMÜLLER** drive.

Connecting the VRS RainSens

- Remove the **cover** of the housing, to configure the **VRS** RainSens.
- After the VRS RainSens is connected to the power supply, the green LED of the VRS RainSens starts flashing.
- The **VRS RainSens** is now heating up. This takes approx. 4 minutes minutes, after which the **LED** turns off.



3.) Commissioning with teach-in button

Insert VRS Click in the AUMÜLLER drive



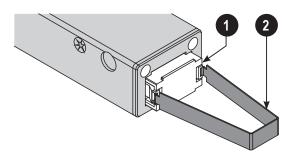
aumüller

Before commissioning, ensure that the power supply to the AUMÜLLER drive and, if applicable, to the VRS RainSens is connected correctly.

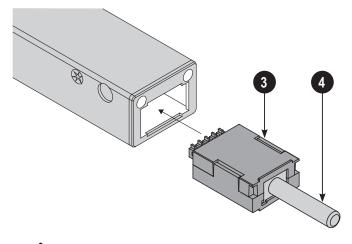
■ Remove the dummy plug **①** from the **AUMÜLLER** drive - using the pliers 2.

NOTE

The **pliers 2** is included in the scope of delivery of the VRS Click 3.



■ Insert the VRS Click ③ into the AUMÜLLER drive. Make sure that the VRS Click 3 are installed in the correct position!

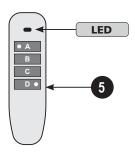




Do not pull at the **antenna 4**. This can have a lasting effect on the reception quality.

Teach-in the VRS Click with VRS Remote

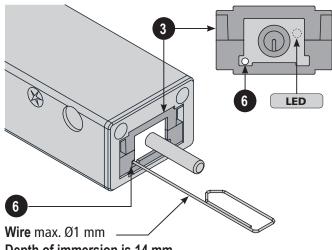
- For a long time press simultaneously VRS Remote ⑤ seesaw-switch A (left) and seesaw-switch D (right) -(multiple seesaw-switch A).
 - The LED at the VRS Remote 6 flashes orange (flash – break – flash - ...).



- Select a seesaw-switch on which the **VRS Click ③** is to
- For a short time press simultaneously left and right with selected seesaw-switch.
 - The LED at the VRS Remote § flashes orange (2x flashes - break - 2x flashes - ...).



- For a short time press with a wire (max. Ø 1mm) the Teach-in button 6 at the VRS Click 6.
 - The LED at the VRS Click flashes fast.

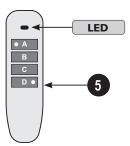


Depth of immersion is 14 mm

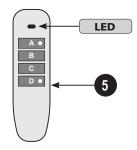
■ If the teach-in is successful, the LED at the VRS Click ③ and at the VRS Remote 5 turns off.

Teach-in VRS RainSens at the VRS Remote

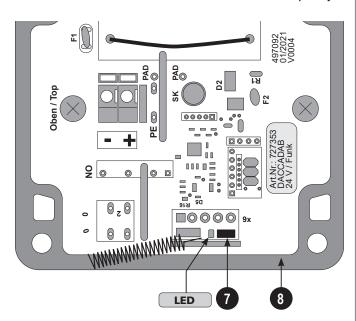
- For a long time press simultaneously VRS Remote seesaw-switch A (left) and seesaw-switch D (right) (multiple seesaw-switch A).
 - The **LED** at the **VRS Remote 5** flashes **orange** (flash break flash ...).



- <u>For a short time</u> press simultaneously the right button at the seesaw-switch **A** and the right button at the seesaw-switch **D**.
 - The **LED** at the **VRS Remote** flashes **orange** (flash break flash ...).



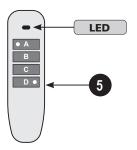
- Press the **Teach-in button 7** at the radio module of the **VRS RainSens 3**.
 - The LED next to Teach-in button flashes quickly.



■ If the teach-in is successful, the LED at the radio module of the VRS RainSens ② and the LED an the VRS Remote ⑤ turns off.

Link / Transfer VRS Click and VRS RainSens

For a long time press simultaneously VRS Remote seesaw-switch A (right) and seesaw-switch D (right) - (multiple seesaw-switch A).



■ If the transfer is successful, the LED at the VRS Remote and at the radio module of the VRS RainSens flashes green once.

٥.

4.) Commissioning with CODE-ID enter

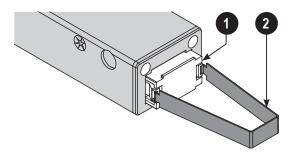
Insert VRS Click in the AUMÜLLER drive



Before commissioning, ensure that the power supply to the **AUMÜLLER** drive and, if applicable, to the **VRS RainSens** is connected correctly.

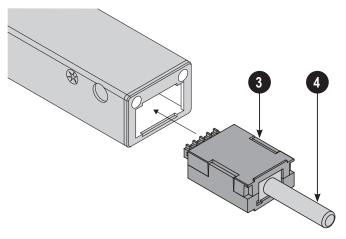
■ Remove the dummy plug **1** from the **AUMÜLLER** drive - using the pliers **2**.

Note The pliers ② is included in the scope of delivery of the VRS Click ③.



■ Insert the VRS Click ③ into the AUMÜLLER drive.

Make sure that the VRS Click ⑤ are installed in the correct position!

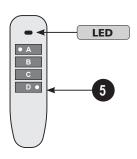




Do not pull at the **antenna 4**. This can have a lasting effect on the reception quality.

Teach-in VRS Click with VRS Remote

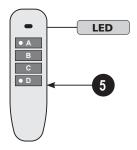
- For a long time press simultaneously VRS Remote seesaw-switch A (left) and seesaw-switch D (right) (multiple seesaw-switch A).
 - The **LED** at the **VRS Remote 5** flashes **orange** (flash break flash ...).



- Select a seesaw-switch on which the VRS Click 3 is to be stored.
- With selected seesaw-switch, left and right <u>press</u> simultaneously.
 - The **LED** at the **VRS Remote ⑤** flashes **orange** (2x flashes break 2x flashes ...).



- For a short time press simultaneously the left button on seesaw-switch **A** and the left button on seesaw-switch **D**.
 - The **LED** at the **VRS Remote ⑤** flashes **orange** (flash short break flash long break flash ...).

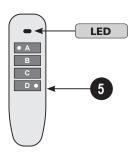


- For a short time enter the CODE-ID at the VRS Click by pressing the corresponding seesaw-switches.
- When entering the 8-digit letter code, the LED at the VRS Remote ⑤ is flashing green.

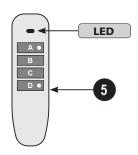
 The LED at the VRS Click ⑤ starts to flash slowly.
- If the teach-in is successful, the **LED** at the **VRS Click 3** and at the **VRS Remote 5** turns off.

Teach-in VRS RainSens at the VRS Remote

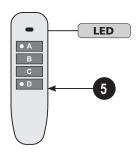
- For a long time press simultaneously VRS Remote seesaw-switch A (left) and seesaw-switch D (right) (multiple seesaw-switch A).
 - The **LED** at the **VRS Remote 5** flashes **orange** (flash break flash ...).



- <u>Press simultaneously</u> the right button at the seesaw-switch **A** and the right button at the seesaw-switch **D**.
 - The **LED** at the **VRS Remote ⑤** flashes **orange** (flash break flash ...).



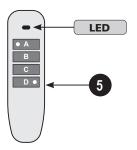
- <u>Press simultaneously</u> the left button at the seesaw-switch **A** and the left button at the seesaw-switch **D**.
 - The **LED** at the **VRS Remote 5** flashes **orange** (flash short break flash long break flash ...).



- For a short time enter the CODE-ID at the VRS Click by pressing the corresponding seesaw-switches.
- When entering the 8-digit letter code, the LED at the VRS Remote ⑤ is flashing green.
- If the teach-in is successful, the LED at the radio module of the VRS RainSens ② and the LED an the VRS Remote ⑤ turns off.

Link / Transfer VRS Click and VRS RainSens

For a long time press simultaneously VRS Remote seesaw-switch A (right) and seesaw-switch D (right) - (multiple seesaw-switch A).

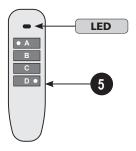


■ If the transfer is successful, the LED at the VRS Remote and at the radio module of the VRS RainSens flashes green once.

5.) Deleting the taught-in participant

Teach-out a VRS Click on the VRS Remote

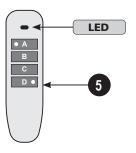
- To delete a VRS Click from the VRS Remote ⑤ <u>for a long time</u> press simultaneously the left button at the seesaw-switch A and the right button at the seesaw-switch D.
 - The **LED** at the **VRS Remote 5** flashes **orange** (flash break flash ...)



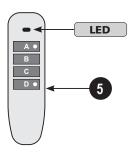
- Select the seesaw-switch from which to delete the VRS Click / AUMÜLLER drive.
- For a long time press the left and the right button of the selected seesaw-switch.
 - The **LED** at the **VRS Remote ⑤** flashes **green** once.
- Deleting the **VRS Click** at the selected seesaw-switch was successful.

Teach-out a VRS RainSens on the VRS Remote

- To delete a **VRS RainSens** from the **VRS Remote** ⑤ <u>for</u> <u>a long time</u> press simultaneously the left button at the seesaw-switch **A** and the right button at the seesaw-switch **D**.
 - The **LED** at the **VRS Remote 5** flashes **orange** (flash break flash ...)



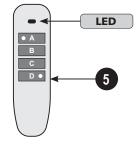
- <u>For a long time</u> press simultaneously the right button of the seesaw-switch **A** and the right button of the seesaw-switch **D**.
 - The **LED** at the **VRS Remote ⑤** flashes **green** once.



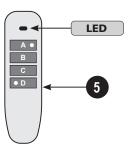
■ Deleting the **VRS RainSens** was successful.

6.) Copy / Clone a VRS Remotes

For a long time press simultaneously the left button of the seesaw-switch **A** and the right button of the seesaw-switch **D** - at the **VRS Remote** which is to be copied.



■ For a long time press simultaneously at the VRS Remote ⑤ the right button of the seesaw-switch A and the left button of the seesaw-switch D - to which the configuration is to be transferred.



■ If the configuration is successful, the LED on the VRS Remote ⑤ turns off.

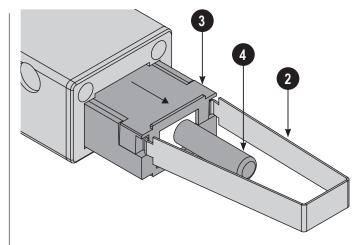
7.) Dismantling the radio sensor when replacing a defective drive.

When replacing a defective **AUMÜLLER** drive, the **VRS Click 3** must be dismantled.

- Switch off the supply voltage.
- Disconnect the connection cable from the defective drive.
- Dismantle the defective drive.
- Pull out the VRS Click ③ from the AUMÜLLER drive using the pliers ②.



Do not pull at the **antenna 4**. This can have a lasting effect on the reception quality.



8.) Stopping the drive during the opening process / closing process

To stop the drive in an intermediate position, press the direction of movement again.

OPEN button -> moves open -> OPEN button -> stop

OPEN button -> moves open -> CLOSE button -> moves closed

07

Demounting and dismantling

The Control Unit must be stored only in locations protected from moisture, severe contamination and temperature fluctuations (not above 30°C). The packaging must not be removed until the control system is to be installed. Disconnect the accumulators and store them separately after the control device has already been in operation.

It is imperative that the following is observed for storage of the accumulators:



Keep the storage time of lead-acid accumulators short, because the accumulators discharge as time passes. At the latest after seven months in storage accumulators must be recharged. Use either a suitable accumulator charger or connect the accumulators to an EMB Control Unit and supply same with mains voltage. In both cases, charging requires a minimum of 8 hours (depending on the discharge state).

If the Control Unit is permanently decommissioned the statutory provisions for destruction, recycling and disposal must be observed. The control device contains plastic, metal, electrical components and accumulators. Replaced accumulators contain highly toxic pollutants and may therefore only be disposed of at collection points prescribed by the legislator.



Before dismantling the Control Unit, isolate it completely from the mains!

Disposal

According to the European Directive 2012/19 / EU on Waste Electrical and Electronic Equipment (WEEE) and its transposition into national law, obsolete electrical appliances must be collected separately and sent for environmentally friendly recycling.





Warranty and Customer service

In principle, our:

"General Terms for the Supply of Products and Services of the Electrical Industry (ZVEI)".

"Terms for the used software".

The warranty is compliant with legal provisions and applies to the country in which the product has been acquired.

The warranty includes material and manufacturing defects incurred during normal use.

The warranty period for delivered material is twelve months.

Warranty and liability claims for personal injuries or tangible damages are excluded, if caused by one or more of the following:

- Improper use of the product.
- Improper installation, commissioning, operation, maintenance or repair of the product.
- Operating the product, if installed defectively or incorrectly, or with its safety and protection devices not working.
- Ignoring instructions and installation requirements in these instructions.
- Unauthorised constructional modifications the product or accessories.
- Disaster situations due to the effects of foreign bodies and force majeure.
- · Wear and tear.

Point of contact for possible warranty claims or for repair parts or accessories is the responsible branch office or the responsible person at

AUMÜLLER AUMATIC GMBH.

Contact data are available at our homepage (www.aumueller-qmbh.de)

Liability

We reserve the right to change or discontinue products at any time without prior notice. Illustrations are subject to change. Although we take every care to ensure accuracy, we cannot accept liability for the content of this document.

Certificate and Declaration of Conformity

We declare under our sole responsibility that the product described under "Data sheet" is in conformity with the following directives:

- 2014/30/EU

 Directive relating to Electro-Magnetic Compatibility
- 2014/35/EU
 Low voltage Directive



Technical file and declaration at firm:

AUMÜLLER AUMATIC GmbH Gemeindewald 11 D-86672 Thierhaupten

Ramona Meinzer Managing Director (Chairman)

Note:

The proof of the application of a quality management system is for company:

AUMÜLLER AUMATIC GMBH

according to the certification basis **DIN EN 9001** as well the "Declaration of Incorporation and Conformity" can be accessed via the QR code or directly on our homepage:

(www.aumueller-gmbh.de)



Translation of the original instructions (German)

Important note:

We are aware of our responsibility, which is why we present life-supporting and value-preserving products with greatest possible conscientiousness. Although we make every effort to ensure that the data and information are as correct and up-to-date as possible, we still cannot guarantee that they are free from mistakes and errors

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Basically the General Terms and Conditions of Aumüller Automatic GmbH apply to all offers, supplies and services.

The publication of these assembly and commissioning instructions supersedes all previous editions.

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