Installation and Commissioning Instructions

LZ6 - 10 A / 24 A / 30 A - Natural ventilation control unit - 24 V DC
 Abbreviations
 Warning and Safety Symbols
 Target Groups, Intended Use
 Safety Instructions

 Data sheet: LZ6 - 10 A / 24 A / 30 A - Natural ventilation control unit 24 V DC

 Circuit diagram: LZ6 - 10 A / 24 A / 30 A - Natural ventilation control unit 24 V DC

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ABBREVIATIONS

Index of abbreviations

These abbreviations are used consistently throughout these assembly & operating instructions. Unless stated differently, all dimensions indicated in this document are in mm.

General tolerances in accordance with DIN ISO 2768-m.

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>aP</td>
<td>Surface mounting</td>
</tr>
<tr>
<td>WxHxD</td>
<td>Width x Height x Depth</td>
</tr>
<tr>
<td>CAN</td>
<td>CAN-BUS</td>
</tr>
<tr>
<td>CM</td>
<td>Control Module</td>
</tr>
<tr>
<td>COM</td>
<td>Common connection</td>
</tr>
<tr>
<td>DIN</td>
<td>German Institute for Standardisation</td>
</tr>
<tr>
<td>DM</td>
<td>Drive Module</td>
</tr>
<tr>
<td>EN</td>
<td>European Standard</td>
</tr>
<tr>
<td>IN</td>
<td>Input</td>
</tr>
<tr>
<td>OUT</td>
<td>Output</td>
</tr>
<tr>
<td>PG</td>
<td>Price group</td>
</tr>
<tr>
<td>PM</td>
<td>Power Modul</td>
</tr>
<tr>
<td>PS</td>
<td>Power supply</td>
</tr>
<tr>
<td>RAL</td>
<td>Central European Colour Standard</td>
</tr>
<tr>
<td>RM6</td>
<td>Relay Module</td>
</tr>
<tr>
<td>RWA</td>
<td>SHEV – smoke and heat exhaust ventilation</td>
</tr>
<tr>
<td>SM</td>
<td>Sensor Module</td>
</tr>
<tr>
<td>uP</td>
<td>Flash mounting</td>
</tr>
<tr>
<td>WM</td>
<td>Weather Module</td>
</tr>
<tr>
<td>WRG</td>
<td>Wind direction sensor</td>
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Scale units

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>°C</td>
<td>Degree Celsius</td>
</tr>
<tr>
<td>A</td>
<td>Amps</td>
</tr>
<tr>
<td>Ah</td>
<td>Amp-hrs</td>
</tr>
<tr>
<td>Kg</td>
<td>Kilogram</td>
</tr>
<tr>
<td>m</td>
<td>Metres</td>
</tr>
<tr>
<td>min</td>
<td>Minutes</td>
</tr>
<tr>
<td>mm</td>
<td>Millimeters</td>
</tr>
<tr>
<td>N</td>
<td>Newtons</td>
</tr>
<tr>
<td>s</td>
<td>Seconds</td>
</tr>
<tr>
<td>Pcs.</td>
<td>Pieces</td>
</tr>
<tr>
<td>V</td>
<td>Volts</td>
</tr>
<tr>
<td>PU</td>
<td>Packaging Units</td>
</tr>
<tr>
<td>Vpp</td>
<td>Residual ripple (Voltage Peak-Peak)</td>
</tr>
<tr>
<td>W</td>
<td>Watts</td>
</tr>
<tr>
<td>Ω / kΩ</td>
<td>Ohm / kilo-Ohm</td>
</tr>
</tbody>
</table>

Figures

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC</td>
<td>Alternating current (50Hz / 60Hz)</td>
</tr>
<tr>
<td>DC</td>
<td>Direct current</td>
</tr>
<tr>
<td>I</td>
<td>Electric current</td>
</tr>
<tr>
<td>L</td>
<td>Length</td>
</tr>
<tr>
<td>ME</td>
<td>Module space unit (1 ME = 23 mm)</td>
</tr>
<tr>
<td>NC</td>
<td>Contact „close“ (normally close)</td>
</tr>
<tr>
<td>NO</td>
<td>Contact „open“ (normally open)</td>
</tr>
<tr>
<td>P</td>
<td>Electric power</td>
</tr>
<tr>
<td>R</td>
<td>Electrical power</td>
</tr>
<tr>
<td>U</td>
<td>Electric voltage</td>
</tr>
<tr>
<td>Um</td>
<td>Change over switch</td>
</tr>
</tbody>
</table>

WARNING AND SAFETY SYMBOLS IN THESE INSTRUCTIONS:

The symbols used in the instructions shall be strictly observed and have the following meaning:

⚠️ **DANGER**

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

⚠️ **WARNING**

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

⚠️ **CAUTION**

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

⚠️ **NOTE**

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

⚠️ **USEFUL NOTE**

Useful note for an optimum installation.

⚠️ **NOTE REGARDING THE SYSTEM CONFIGURATION**

Note regarding the system configuration using the free software of the Control Unit manufacturer (USB connection).
TARGET GROUP
These instructions are intended for personnel trained in electrical engineering and skilled operators of systems for natural smoke ventilation (NRA / SHEV) (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.

WARNING
This device is not intended for use by persons (including children) with physical, sensory or mental limitations or lacking experience and / or knowledge, unless they are supervised by a person who is responsible for the safety or were instructed by him on the usage of this equipment. Children should be supervised to ensure that they are not playing with this device. Cleaning and operator’s maintenance may not be performed by children without supervision.

INTENDED USE
Area of application / Scope of application
This control device is intended for power-feeding and controlling electromotive operated windows in facade and roof areas. **The prime task of this product**, in combination with the electromotive window, is **to evacuate hot smoke and combustion gases in case of fire** to save human lives and protect material assets. Furthermore, the electromotive operated window ensures **fresh air supply for the natural ventilation** of the building.

By installing the drive to a movable element of the window a so-called **“power-operated window”** is created which, according to the Machinery Directive 2006/42/EG, represents a machine. The control device is designated for driving such a window. Where it seems reasonable, these installation instructions point out sensibly predictable hazards and risks resulting from a power operated window.

NOTE
Attention must be paid to possible hazards when used with tilting or rotating windows, whose secondary closing edges are located at less than 2,5 m installation height above the floor, under consideration of the Control Unit and usage!

We as manufacturers are well aware of our duties and responsibilities regarding the development, manufacturing and placing of safe window drives on the market and consistently implement them. Ultimately, however, we have no direct influence on the usage of our drives. Therefore, as a precaution, we point out the following:

- The **constructor or his agent** (architect, specialist planner) **are obligated** by law to **evaluate the hazards to persons**, originating from the usage, installation position, opening parameters as well as the planned type of installation of the power operated window and the external Control Unit, already in the planning phase and to **establish necessary protective measures**.
- The **constructor / manufacturer** of the machine **“power-operated window” must implement** the planned protective measures at the installation site or, if not yet established, **determine them** by their own responsibility and detect or **minimize possible remaining risks**.

By connecting the window drives with a control device and their operation the constructor of the complete system becomes the manufacturer of the power-operated window! If necessary, he is obligated 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!
The need for a risk assessment at the installation site due to the reasonably foreseeable misuse.

A risk assessment in accordance with the Machinery Directive 2006 / 42 / EG by activation of the power-operated window for natural ventilation is absolutely necessary under the following conditions:

- the installation height of the drive is < 2.5 m above the floor and
- the opening width at the HSK > 200 mm, or
- the closing speed at the HSK is > 15 mm/s, or
- the opening speed at the HSK is > 50 mm/s, or
- the closing force at the HSK is > 150 N

The following flow chart can be applied, which also includes the protective measures in accordance with EN 60335-2-103/2016-05.

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**Risk analysis in accordance with DIN EN 60335-2-103**

- **NSHEV in accordance with EN12101-2 without dual purpose for ventilation**
  - Using drives
  - Natural ventilation
  - Installation height of drive: > 2.5 m above floor (ZAA.20.1)
    - Yes
    - No
  - Opening at HSK: < 200 mm and Speed at HSK: CLOSE < 15 mm/s / OPEN < 50 mm/s (20.ZAA.2)
    - Yes
    - No
    - Risk covered by Declaration of Conformity for window drives

- **NSHEV in accordance with EN12101-2 with dual purpose for ventilation (1.Z.109)**

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**Risk evaluation**

- **Protection devices**
  - Hold-to-run switch: stops movement at HSK < 20 mm at a closing force of > 150 N at HSK (20.ZAA.5)
  - Operating element in direct range of vision: a.) Key switch or b.) other switch, then: installation > 1.5 m, inaccessible for public (7.12.1)
  - Keep people away during closing!

- **Contact-free anti-trap protection**
  - Contact-based anti-trap protection
  - Passive infra-red and active light sensors or pressure mats

- **Contact-based anti-trap protection**
  - Pressure-sensitive safety switch strips or Motor current monitoring systems (internal and external)

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![CE label](image)
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 authorized by AUMÜLLER are considered as unintended use even if their perfect functioning is proven at commissioning (e.g. approval under building law).

Basic functions of SHEV (smoke and heat exhaust system) control devices:
- Control of electromotive window drives for smoke and heat exhaust in case of fire and for “natural ventilation”.
- Evaluation of trigger signals of manual and automatic smoke detectors as well as of fire alarm systems.
- Emergency power supply provided by batteries for maintaining safety functions if power supply is interrupted in case of fire.
- Monitoring the power supply of all important connections for malfunctions.
- Diverse automatic and manual control options for controlling natural ventilation (e.g. via wind and rain sensors).
- Transmission of signals of all essential operating states for external evaluation (may require additional components).
- Comfortable configuration and parameterization of control via PC software.
- Optional integration into external data bus systems via dd-on modules.

Safety Instructions

Installation
These instructions address expert and safety-conscious electricians and / or qualified personnel knowledgeable of the electrical and mechanical installation of drives and control systems.

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

Crush and shear points
To avoid injuries, crushing and shear points between casement and frame must be secured against entrapment up to an installation height of 2,5 meters above the floor with appropriate measures. This can be achieved e.g. by using contact-based or contactless protective devices against entrapment, which stop the motion through contact or through interruption by a person. A warning symbol at the opening element must indicate this clearly.

Routing cables and electrical connection
Routing or installing electrical lines and connections may be performed only by approved specialist companies. Never operate drives, Control Units, operating elements and sensors at operating voltages and connections contrary to the specifications of the manufacturer.

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

All relevant instructions shall 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).

Areas of application
The control device shall only be used according to its intended use. For additional applications consult the manufacturer or his authorized dealer.

WARNING
Risk of crushing and entrapment! Electromotive operated windows can close automatically! The compressive force is absolutely sufficient to crush fingers in case of carelessness.

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Risk of crushing and entrapment! Electromotive operated windows can close automatically! The compressive force is absolutely sufficient to crush fingers in case of carelessness.

NOTE

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SAFETY INSTRUCTIONS

Installation instruction
LZ 6 - Natural ventilation control unit

The types of cable, cable lengths and cross-sections shall be selected in accordance with the manufacturer’s technical data. If necessary, the cable types shall be coordinated with the competent local authorities and energy supply companies. Low-voltage lines (24 V DC) shall be routed separate from the high-voltage lines. Flexible cables may not be flush-mounted. Freely suspended cables shall 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 shall be checked for tightness of threaded connections and cable ends. Access to junction boxes, clamping points and external drive control systems shall be ensured for maintenance work.

Commissioning, operation and maintenance

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

The end-user shall be instructed in intended use of the drives and, if necessary, the safety instructions. The end-user shall 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.

Other persons must be kept away from the casement when a hold-to-run switch (pushbutton) is operated or when a window, which has been opened by a smoke and heat exhaust system, is closing!

The operating element of hold-to-run switches must be installed within direct view from the window, but apart from moving elements. If the switch is not a key-operated switch it must be installed at a minimum height of 1,5 m and inaccessible to the public!

Do not allow children to play with permanently mounted control devices and keep remote controls out of reach for children!

Before working on the system it must be completely disconnected from the power supply and emergency power supply (e.g. batteries) and secured against unintentional reactivation. While working in the Control Unit the workplace must be secured to prevent unauthorized access. It must be ensured that unauthorized personnel are unable to open the Control Unit.

The installation instructions of system components (smoke detector, natural smoke and heat exhaust ventilators, drives, etc.) are part of the documentation for the complete system and must be kept accessible for authorized qualified personnel, together with the installation and operating instructions, for the entire service life of the system.

Check all functions of the system before releasing it for operation.

Software terms and conditions

The Control Unit is configured by the factory for the intended use (standard configuration). The software, especially developed for this Control Unit, allows a quick and easy adjustment of the factory setting to the respective requirements. Furthermore, the system status can be saved, retrieved and printed.

Modifiable standard configurations are particularly emphasized in these instructions. The software is part of the shipment of the Control Unit. The functional range of this unlicensed version can be expanded by activation against payment (license).
The prerequisites of the system (see chapter "SYSTEMS CONFIGURATION OF SOFTWARE") must be checked prior to the installation. The "Software clause for handing over the standard software as part of shipments" of the ZVEI (German Electrical and Electronic Manufacturer’s Association) is accepted as legally binding upon installation. See our homepage:

Firm AUMÜLLER Aumatic GmbH. (www.aumueller-gmbh.de)

The configuration software of the control device largely excludes damages caused by incorrect settings. As a matter of precaution we point out that AUMÜLLER, as manufacturer, cannot assume liability for damages caused by using AUMÜLLER software, because AUMÜLLER has no influence on a perfect systems environment or object-specific systems configuration.

We, therefore, recommend to protect the operating system and software of the systems sufficiently against unauthorized interference (e.g. by using a password) and to attend the training provided by the manufacturer.

Replacement parts
System components shall only be replaced with spare parts of the same manufacturer. There is no liability, warranty or customer service if third-party parts are used. Exclusively original spare parts of the manufacturer shall be used for expansions.

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

- **Operation:**
  - Ambient temperature: -5 °C ... +40°C
  - Relative humidity: < 90% less 20°C; < 50% less 40°C; no formation of condensation

- **Transport / Storage:**
  - Storage temperature: 0°C ... +30°C
  - Relative humidity: < 60%

Accident prevention regulations and workmen’s compensation insurance guidelines
For work on or in a building or building part the provisions and instructions of the respective accident prevention regulations (UVV and workmen’s compensation insurance guidelines (BGR /ASR) shall be observed and adhered to.

Declaration of Conformity
The control device is manufactured and inspected for its intended use in accordance with the European guidelines. The respective Declaration of Conformity is on hand. In case 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 system of power-operated windows and a Declaration of Conformity according to Machinery Directive 2006/42/EG issued as well as a CE labeling obtained.

GUIDELINES AND STANDARDS
The most recent state of country-specific laws, regulations, provisions and standards must absolutely be observed during the 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)** of 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 electrical appliances
    - EN 60730-1 Automatic electrical controls
    - EN 12101-10 / prEN 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, the installation and the operation outside Germany the relevant national laws, regulations, standards and safety provisions apply. The constructor is responsible for the proper installation or operation and the issuing of a Declaration of Conformity according to European guidelines.
**LZ6 - 10 A / 24 A / 30 A - Natural ventilation control unit 24 V DC**

<table>
<thead>
<tr>
<th>Application:</th>
<th>Natural ventilation control panel with power supply for the controlling of 24 V DC drives in 6 ventilation groups.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating voltage:</td>
<td>230 V AC (195 – 253 V AC, 50/60 Hz)</td>
</tr>
<tr>
<td>Output voltage:</td>
<td>24 V DC (20 – 28 V DC / 2 Vpp)</td>
</tr>
<tr>
<td>Inputs:</td>
<td>6x Ventilation button lines with 2 priorities (P3: LOW; P2: HIGH)</td>
</tr>
<tr>
<td></td>
<td>1x Input all outputs OPEN/CLOSE (P1)</td>
</tr>
<tr>
<td>Outputs:</td>
<td>6x Drive output lines</td>
</tr>
<tr>
<td></td>
<td>1x 24 V DC / 500 mA (e.g. rain sensor)</td>
</tr>
<tr>
<td>Display:</td>
<td>Power, output voltage switched in OPEN/CLOSE direction</td>
</tr>
<tr>
<td>Slot:</td>
<td>for optional BUS module (LON / KNX)</td>
</tr>
<tr>
<td>Housing:</td>
<td>Surface mounting, steel sheet, RAL 7035 (light grey)</td>
</tr>
<tr>
<td>Dimensions (WxHxD):</td>
<td>420 x 300 x 144 mm</td>
</tr>
<tr>
<td>Connection terminals:</td>
<td>Screw terminals 2,5 mm² (rigid wire)</td>
</tr>
<tr>
<td>Protection rating:</td>
<td>IP30</td>
</tr>
</tbody>
</table>

### VERSIONS

<table>
<thead>
<tr>
<th>Part.-No.:</th>
<th>Max. power consumption:</th>
<th>Output current:</th>
</tr>
</thead>
<tbody>
<tr>
<td>660070</td>
<td>506 W</td>
<td>10 A (per line max. 5 A)</td>
</tr>
<tr>
<td>660071</td>
<td>805 W</td>
<td>24 A (6 x 4 A)</td>
</tr>
<tr>
<td>660072</td>
<td>1518 W</td>
<td>30 A (6 x 5 A)</td>
</tr>
</tbody>
</table>

**Feature / Equipment**

- DIP switch for the configuration of the inputs with low priority in jog-switch or dead-man mode
- Inputs of various LZ6 are switchable in parallel.
- All outputs are fused.
**CIRCUIT DIAGRAM:**

**LZ6 - 10 A / 24 A / 30 A**  
**NATURAL VENTILATION CONTROL UNIT 24 V DC**

Only connect when disconnected from the mains power supply! Switch off power supply and secure against reconnection!

Only 24 V DC drives may be connected.

Connection LK3 only Aumüller S12!

The running direction of the drives has to be conform with the indicated direction.

Otherwise exchange the leads: BN (brown) and BU (blue)

**P1 - Input**  
common control

**H (P2)** = HIGH - higher priority  
**L (P3)** = LOW - lower priority  
for switching process

Plug in of ventilation button, as well as weather, time and temperature controls or signals of building management system.

**BK** = black  
**BN** = brown  
**BU** = blue  
**GN** = green  
**RD** = red  
**WH** = white

**Output:** 24 V DC, 500 mA  
**MOD BUS**

**USB port** can using LZ6 configuration software various functions for the respective ventilation groups are set.

On the DIP switch can be set for each ventilation groups, if the button in latching (ON) or in dead-man (OFF) operation works.

On the BUS slot, depending on the configuration of the control unit, a KNX or LON field BUS module can be plugged, to bind the ventilation control unit LZ6 to a building management system.

The USB port can using LZ6 configuration software various functions for the respective ventilation groups are set.
### FUSES

#### Fuses LZ6 - 10 A / 24 A / 30 A

<table>
<thead>
<tr>
<th>F6</th>
<th>F5</th>
<th>F4</th>
<th>F3</th>
<th>F2</th>
<th>F1</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 AT (engine output)</td>
<td>5 AT (engine output)</td>
<td>5 AT (engine output)</td>
<td>5 AT (engine output)</td>
<td>5 AT (engine output)</td>
<td>5 AT (engine output)</td>
</tr>
</tbody>
</table>

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### MAINTENANCE AND MODIFICATION

To ensure continuous function and safety of the complete system periodic maintenance by a specialist company is required at least once a year (as mandated by law for smoke and heat exhaust systems). Operational readiness must be checked regularly, at least once a month.

After opening of the system housing voltage carrying parts are exposed! Each time, before performing maintenance work or making a modification of the structure (e.g. replacement of the window drive), the mains voltage and – as far as available – the batteries must be completely disconnected and secured against unintentional reactivation (lock in separation mode).

The information provided in these instructions for the maintenance must be observed. Malfunctions must be remedied immediately. Only spare parts made by the manufacturer may be used. Between maintenance intervals the operator shall carry out or order a visual inspection at least once and document it in writing in the log book. We recommend a maintenance contract with a specialist company authorized by the manufacturer. A sample maintenance contract can be downloaded from the homepage of

**Firm Aumüller Automatic GmbH**
(www.aumueller-gmbh.de).

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### IMPORTANT MAINTENANCE INFORMATION

- While working in the Control Unit the workplace must be secured against unauthorized access.
- The specialists performing the maintenance work are solely responsible for the maintenance.
- For smoke and heat exhaust systems a log book must be kept in which the maintenance work must be documented. Special attention must be paid to operating events (e.g. repeatedly occurring malfunctions) which may be recorded.
- These installation and operating instructions are part of the maintenance documents. The control device may be maintained only by considering the information provided therein. This affects also system supplements and the exchange of components. A separate maintenance protocol (possible information on template on the homepage) should be prepared and filed with the maintenance documents.
- Only original parts may be used. Otherwise the warranty obligation and product liability of the manufacturer shall no longer apply.
- For the maintenance of individual system components the installation and maintenance instructions of the manufacturer of these components shall be binding. If they are not available, they must be requested from the manufacturer. In case special maintenance instructions are prescribed (e.g. for natural smoke and heat exhaust ventilators pursuant to EN 12101-2), they must also be on hand.

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### What has to be serviced?

- Check all **connections** (also the ones in the Control Unit) for tightness and for possible damage.
- Check all **fuse links**.
- Check charge level and installation date of back-up **batteries** and exchange the batteries, if necessary (batteries must be exchanged 4 years after installation). Note down the exchange date on the battery. Dispose of removed batteries in conformity with legal requirements.
- Check **drive control** for proper function. Also check drive run directions. If the actuation is correct but the drive is still not working properly, pay regard to the assembly and maintenance instructions of the drive manufacturer.

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### USB

The system configuration must be checked and recorded with each service.
Demounting, dismantling and disposal

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

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

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

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

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.

Warranty and customer service

In principal apply our:
- „General Terms for the Supply of Products and Services of the Electrical Industry (ZVEI)“. 
- „Terms for the used software“.

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

The warranty period for delivered material is twelve months.

Warranty and liability claims for personal injuries or material 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 by defect and improper installed or not functioning safety and protection devices.
- Ignoring instructions and installation requirements in these instructions.
- Unauthorized constructional modifications at the product or accessories.
- Disaster situations due to effects of foreign bodies and Acts of God.
- 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 Firm AUMÜLLER Aumatic GmbH. Contact data are available at our homepage (www.aumueller-gmbh.de)
KONFORMITÄTSERKLÄRUNG
DECLARATION OF CONFORMITY

Hersteller:
Manufacturer:
aumüller
Aumüller Aumüller GmbH
Gemeindewald 11
88672 Thierhaupten
Germany

Produktart | Product type: Elektrische Steuereinrichtungen / Control panels
Produktbaureihe | Product series:
LZ1 / LZ1 K1X
LZ6 / LZ6 K1X

Ab Seriennummer | From serial number: XXXXX-XXX
Ab Datum | From date (Year-W-Week): 18W27

Wir bestätigen die Konformität des oben bezeichneten Produktes mit folgend gelisteten EU-Richtlinien sowie Normen:
We herewith confirm the conformity of the above mentioned product with EC Directives and the standards listed below:

VERORDNUNGEN / RICHTLINIEN
REGULATIONS / DIRECTIVES

Niederspannungsrichtlinie 2014/35/EU
Low Voltage Directive 2014/35/EU
Richtlinie über elektromagnetische Verträglichkeit 2014/30/EU
Directive relating to Electro-Magnetic Compatibility 2014/30/EU

HARMONISIERTE NORMEN
HARMONIZED STANDARDS

DIN EN 60730-1:2012-10
DIN EN 61000-6-1:2016-05; DIN EN 61000-6-2:2016-05
DIN EN 61000-6-3:2011-09 + B12012-11; DIN EN 61000-6-4:2011-09

SONSTIGE TECHNISCHE NORMEN UND SPEZIFIKATIONEN
FURTHER TECHNICAL STANDARDS AND SPECIFICATIONS

DIN EN 50491-5-1:2010-11; DII EN 50491-5-2:2010-11 (KNX)
Montageanweisung / Installation instructions

Thierhaupten, 25.06.2018

R. Meinzer
Geschäftsführer / Verantwortlich für die technische Dokumentation
Managing Director / Head of technical documentation

Die Sicherheitshinweise der mitgelieferten Produktdokumentation sind zu beachten!
The safety instructions of the supplied product documentation are to be observed!
Installation instruction
LZ 6 - Natural ventilation control unit

VdS Schadenverhütung bescheinigt die Anwendung eines Qualitätsmanagementsystems für

aumüller
Aumüller Aumatic GmbH - Gemeindewald 11 - D-65672 Thierhaupten

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<th>Zertifikat-Nr.</th>
<th>Anzahl der Seiten</th>
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<td>09.10.2020</td>
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Geltungsbereich des Zertifikates:

Entwicklung, Herstellung und Vertrieb von Produkten und Systemen für Rauch- und Wärmeabzug und natürliche Gebäudelüftung


Jegliche Wiederholung oder Vervielfältigung des Zertifikates muss den Inhalt korrekt wiedergeben und darf nicht auf andere Weise verändert werden.

Zertifizierungsgrundlagen:

DIN EN ISO 9001
Qualitätsmanagementsysteme
Anforderungen
Ausgabe September 2015
Qualitätsmanagementsystem des Zertifikatsinhabers

Köl, den 02.10.2017

Dr. Reimermann           i.V. Edel

Geschäftsführer           Leiter der Zertifizierungsstelle

VdS Schadenverhütung GmbH
Zertifizierungsstelle
Amalienauer Str. 174
D-50765 Köln

Ein Unternehmen des Gesamtverbandes der Deutschen Versicherungswirtschaft e.V. (DVV)
AKKREDITIERT ALS Zertifizierungsstelle der Ausgabe 2020 der VdS - Deutsche Akkreditierungsgesellschaft GmbH.
TRANSLATION OF THE ORIGINAL INSTRUCTIONS (GERMAN)

Once the assembly and commissioning has been completed, the installer of a system for natural smoke extraction (SHEV) and „natural ventilation of the window and door“ shall hand these instructions over to the end-user. The end-user shall store these instructions in a safe place for further reference and use, if required.

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.