Operating instructions

Automated latch release
Automatic door lock
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Automated latch release Operating instructions

Intended use

• The automated latch release is used in conjunction with automatic locking systems for unlocking doors by motor.

• It is suitable for installation in timber, aluminium, steel and PVC front doors for residential and public buildings.

• All assembly and electrical installation work must be carried out according to our assembly and installation instructions. Wiring the unit incorrectly can irreparably damage its electronic components.

• The automated latch release can be connected to an external access control system (e.g. wireless, transponder or fingerprint scanner system) via a voltage-free contact (switching time: min. 1 second).

• Use the automated latch release only when it is in a technically sound condition. Do not modify the unit's components in any way.

• Use the automated latch release only with genuine KFV accessories.

Improper use

• The automated latch release must not be installed in moisture-prone areas or areas with a corrosive atmosphere (e.g. electroplating shops).

• The length of the cable between the power supply and the automated latch release must not exceed 13 m.

Safety notes

• Work on an 230 V AC mains power supply may only be performed by a qualified electrician.

• All work on the 230 V AC mains power supply must be carried out in compliance with the current German VDE regulations (e.g. VDE 0100) and any relevant country-specific requirements.

• All-pole safety isolation should be used when fitting the power lead on-site.

• Some external access control systems available on the market transmit a brief "open" signal when the operating voltage is switched on. This can mean that the automated latch release will open the door following a power cut. If in doubt, please contact the system manufacturer.

Warning

Where power supply cables are routed parallel to data cables (IDSN, DSL etc), interference can occur, eg: with the data transfer speed.
Switching the acoustic signal on and off

In its "supplied" state, the automated latch release beeps as it draws the latch electrically into the changeover function. It emits a constant beep for as long as terminal 4 receives an "open" signal. In some cases this constant beeping is undesirable, e.g. if the door needs to be kept unlocked to provide permanent access at certain times.

In this instance, the automated latch release can be prevented from beeping by programming it as described below.

1.) Retract all locking elements
2.) Open the door and hold it open
3.) Switch off the operating voltage
4.) Press and hold down the "open" button (terminal 2 (+) with terminal 4 ("open"))
5.) Switch on the operating voltage
6.) The automated latch release now switches to programming mode (a sequence of beeps is heard)
7.) Release the "open" button for about 1 s and press and hold it down once again
8.) An sequence of beeps is generated to indicate that programming was successful

These programming steps can be followed any number of times in order to switch between the following two modes.
- Automated latch release beeps as the latch is drawn into the changeover function
- Automated latch release does not beep as the latch is drawn into the changeover function

Whichever mode is currently selected will remain active even if the power supply is interrupted.
Locking and unlocking the door

Night mode

**Locking the door:** When the door clicks shut, the hookbolts in the additional lock cases automatically engage.

**Unlocking the door:** The door can be unlocked by turning the profile cylinder or the indoor lever handle, and can be opened by the automated latch release.

Day mode

**Locking the door:** Using an optional device – the daytime unlocking mechanism – the hookbolts in the additional lock cases can be prevented from automatically engaging. In this case the door is held shut by the latch only.

**Unlocking the door:** The door can be unlocked by turning the profile cylinder or the indoor lever handle, and can be opened by the automated latch release.

Child safety lock

**Locking the door:** If the door is currently in night mode and was locked automatically, the deadbolt in the main lock can be retracted by turning the profile cylinder. This places the lock in child safety mode.

**Unlocking the door:** If the child safety lock is active, the door cannot be opened using the internal handle or the automated latch release. To enable these actions, the child safety lock must first be deactivated by turning the profile cylinder.

Operation with optional external devices

<table>
<thead>
<tr>
<th>Handheld wireless transmitter</th>
<th>Infra-red access key</th>
<th>Transponder</th>
<th>Fingerprint scanner</th>
</tr>
</thead>
<tbody>
<tr>
<td>- unlocking/opening</td>
<td>- unlocking/opening</td>
<td>- unlocking/opening</td>
<td>- unlocking/opening</td>
</tr>
</tbody>
</table>
Programming

Programming the handheld wireless transmitter

› Unscrew the cover on the receiver to access the programming button.

› The green LED L1 lights up.
› Press down button P1 until the green LED L2 lights up.
› Press the required button on the handheld wireless transmitter.
› LED L2 flashes once and the relay is audibly activated.
› You have now programmed the button on the handheld wireless transmitter.

Note: If the red LED L3 lights up at the same time as the green LED L2, this indicates that the button on the handheld wireless transmitter was already programmed, but has now been deleted.

The other button on the handheld wireless transmitter can be assigned to the same wireless receiver or to a different one, as required.

Deleting handheld wireless transmitters

If a handheld wireless transmitter has been lost or stolen, it cannot be deleted individually; all handheld wireless transmitters must be deleted at once.

› Press down button P1 until the green LED L2 lights up.
› Briefly release button P1, then press it down again until the red LED L3 and the green LED L2 light up three times.
› You have now deleted all handheld wireless transmitters. The remaining handheld wireless transmitters must be programmed in again.

Range between handheld wireless transmitter and receiver

<table>
<thead>
<tr>
<th>Medium</th>
<th>Range without aerial</th>
<th>Range with aerial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel</td>
<td>approx. 2 m</td>
<td>approx. 5 m</td>
</tr>
<tr>
<td>Concrete</td>
<td>approx. 10 m</td>
<td>approx. 20 m</td>
</tr>
<tr>
<td>Timber, aluminium, PVC</td>
<td>approx. 20 m</td>
<td>approx. 30 m</td>
</tr>
<tr>
<td>Air</td>
<td>approx. 30 m</td>
<td>approx. 50 m</td>
</tr>
</tbody>
</table>
Infra-red access keys

Infra-red eye

In the infra-red eye there is a red LED which indicates whether the door is locked or open.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Solid light</td>
</tr>
<tr>
<td>2</td>
<td>Flashing</td>
</tr>
<tr>
<td>3</td>
<td>Off</td>
</tr>
</tbody>
</table>

Fig. 2 Determining whether the door is locked or unlocked

Infra-red master key

The infra-red master key is needed for programming in and deleting infra-red access keys. Before it can be used for programming in infra-red access keys, it must firstly be programmed in itself.

- Only one infra-red master key is permissible per F-type automated latch release. However, any number of F-type automated latch releases can be assigned to a single infra-red master key.
- The infra-red master key cannot be used to open the door; it is for programming only.

Using infra-red access keys

For correct signal transmission, the infra-red access key should be positioned between approx. 2 and 7 m from the infra-red eye. The quality of the signal depends on the charge level of the batteries and the amount of sunlight. If the infra-red eye is exposed to strong sunlight, the key should be operated closer to the eye.

Unlocking/opening the door

› Press the "open" button. This will unlock the door. The LED on the infra-red eye will light up.

Important

- For security reasons, if you lose the infra-red master key you should switch off the operating voltage on the automated latch release until you have obtained a new infra-red master key from a specialist dealer and programmed it into the system.
- It is not possible to obtain information about opening sequences triggered by the integrated infra-red access control system, as the automated latch release does not store this information.
- For security reasons, all infra-red access keys must be programmed in individually.
- The infra-red master key should always be kept under lock and key in order to prevent misuse.
Programming in the infra-red master key

› Retract all locking elements.
› Open the door and hold it open.
› Switch off the operating voltage.
› Press and hold down the "open" button (terminal 2 (+24 V) with terminal 4 ("open"))
› Switch on the operating voltage.
› The red LED in the infra-red eye will flash.
› Hold the infra-red master key in front of the infra-red eye and press the button on it several times.
› The red LED in the infra-red eye will light up
› An acoustic signal is generated to indicate that programming was successful.

All infra-red access keys must now be activated once more.

Programming in infra-red access keys

› Switch off the operating voltage. Wait for all LEDs to extinguish.
› Switch on the operating voltage.
› Hold the infra-red master key in front of the infra-red eye and press the button on it several times.
› The red LED will flash.
› Hold the access key in front of the infra-red eye and press any button on it.
› An affirmative sequence of beeps is generated to indicate that programming was successful.
› To check that programming was successful, press the "open" button on the infra-red access key once more.
› Switch on the operating voltage.

Deleting infra-red access keys

Important: The delete process always deletes all infra-red access keys.

› Retract all locking elements.
› Open the door and hold it open.
› Switch off the operating voltage.
› Press and hold down the "open" button (terminal 2 (+24 V) with terminal 4 ("open"))
› Switch on the operating voltage.
› The red LED in the infra-red eye will flash.
› Hold the infra-red master key in front of the infra-red eye and press the button on it several times.
› The red LED in the infra-red eye will light up.
› An acoustic signal is generated to indicate that programming was successful.

All infra-red access keys must now be programmed in again.

Setting up the fingerprint scanner

To set up the fingerprint scanner, please follow the instructions in the "Quick Reference" for the type F automated latch release.
Replacing the batteries

**WARNING Risk of chemical burns from leaking battery acid**

- Batteries must be kept out of the reach of children due to a risk of swallowing. If they are swallowed, seek immediate medical attention.
- Do not recharge, dismantle, heat up or burn batteries.
- Always wear protective gloves when handling spent or damaged batteries.

**Handheld wireless transmitter**

**Note:** Functions already programmed into the handheld wireless transmitter will remain unchanged following battery replacement.

![Fig. 4: Replacing the batteries in the handheld wireless transmitter](image)

- Stack two CR 2016 batteries on top of one another with their positive terminals facing upwards, and place them in the battery compartment.

**Infra-red access keys**

When the battery charge level has fallen to around 40%, the system will briefly beep three times at the end of the opening sequence or the start of the programming sequence. These beeps serve as advance warning that the batteries need to be replaced.

**Note:** Functions already programmed into the infra-red access key will remain unchanged following battery replacement.

![Fig. 5: Replacing the batteries in infra-red access keys](image)

- Stack two CR 2016 batteries on top of one another with their positive terminals facing upwards, and place them in the battery compartment.
Disposing of batteries
The law requires that all spent standard and rechargeable batteries be returned to their manufacturer; they must not be disposed of as household waste. Dispose of the batteries as required by the relevant authorities. Hand them in for recycling. These batteries will be recycled as they may contain e.g. nickel oxide hydroxide and cadmium (Ni-Cd), lead (Pb), cadmium (Cd) or mercury (Hg).

Malfuctions
**Important**: If the problem cannot be rectified as described below, do not open the automated latch release or attempt to repair the system under any circumstances. Get the system repaired by a qualified specialist.

<table>
<thead>
<tr>
<th>Malfunction</th>
<th>Possible causes</th>
<th>Action</th>
</tr>
</thead>
</table>
| The wireless receiver is not receiving a signal | - Battery in handheld transmitter is too low  
- Other systems (e.g. wireless headphones) are transmitting signals of the same frequency (433.92 MHz)  
- Range too small | Replace battery  
Switch off other systems  
(Fit wire aerial to wireless receiver) |
| The door does not lock | - Door is not fully closed  
- Frame components are incorrectly positioned  
- Daytime unlocking mechanism is active  
- Metal filings on release magnet  
- Magnet is shielded by steel components | Shut the door  
Correct the Q adjustment  
Deactivate daytime unlocking mechanism  
Remove metal filings  
Check recess for Q adjustment |
| Door cannot be opened electrically | Circuit breaker in main fuse box has tripped | Reset circuit breaker |

Technical specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
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<tbody>
<tr>
<td>Relative humidity</td>
<td>20 % bis 80 %</td>
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<tr>
<td>Ambient temperature in door</td>
<td>-10 bis +45 °C</td>
</tr>
<tr>
<td>Dimensions</td>
<td>Width 16 mm, length approx. 252 mm, depth 49 mm + width of face plate</td>
</tr>
<tr>
<td>Supply voltage</td>
<td>24 V DC max. 500 mA</td>
</tr>
<tr>
<td>Cable types</td>
<td>LIYCY</td>
</tr>
<tr>
<td>Ambient temperature, non-fixed</td>
<td>-5 bis +50 °C</td>
</tr>
<tr>
<td>Ambient temperature, fixed</td>
<td>-20 bis +70 °C</td>
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</table>
Liability

Intended use

Any use of this product that is not in accordance with its intended use, or any adaptation of or modification to the product and its associated components for which our express consent has not been obtained, is strictly prohibited. We accept no liability whatsoever for any material losses or injury to people caused by failure to comply with this stipulation.

Product liability

Our products are guaranteed – subject to correct installation and proper use – for a period of one year from the date of receipt by a company (according to our general terms and conditions) or as otherwise agreed, and for a period of two years for end consumers, in accordance with statutory provisions. As part of our ongoing improvements, we reserve the right to replace individual components or entire products. Consequential losses resulting from defects are excluded from the warranty within the limits of the law. The warranty shall become void if modifications that are unauthorized by us or have not been described in this documentation are performed on the product and/or individual components, or if the product and/or individual components is/are dismantled or partly dismantled, and the defect is due to the changes made.

Exclusion of liability

The product and its components are subject to stringent quality controls. As a result, they function reliably and safely when used correctly. Our liability for consequential losses and/or claims for damages is excluded, except in the case of wilful misconduct or gross negligence, or where we are responsible for injury to life, limb or health. Strict liability under the German Product Liability Act [Produkthaftungsgesetz] remains unaffected. Liability for the culpable violation of significant contractual obligations also remains unaffected; liability in this case is limited to losses that are specific to the contract and that could have been foreseen. The above regulations do not imply a change in the burden of proof to the detriment of the consumer.

EU Declaration of Conformity

We, KFV KG, declare with full responsibility that this product complies with the provisions of Directives 2008/108/EC and 2006/95/EC of the Council of the European Union.

Environmental protection

Although our products do not fall within the scope of the German Electrical and Electronic Equipment Act (ElektroG), KFV will continue to meet the requirements of this Act and will endeavour to completely eliminate the use of substances that are hazardous to the environment as soon as this becomes technically feasible. Electrical products should not be disposed of as household waste.

Feedback on documentation

We welcome your comments and suggestions on how to improve our documentation. Please send us your feedback by e-mail to dokumentation@kfv.de.
# PRÜFBERICHT - TEST REPORT

**Elektromagnetische Verträglichkeit (EMV) - Electromagnetic Compatibility (EMC)**

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<tr>
<th>ANTRAGSTELLER - APPLICANT</th>
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<tr>
<td>Firma - Company:</td>
</tr>
<tr>
<td>KFV Karl Fliether GmbH &amp; Co. KG</td>
</tr>
<tr>
<td>Anschrift - Address:</td>
</tr>
<tr>
<td>Siemensstr. 10</td>
</tr>
<tr>
<td>D - 42551 Velbert</td>
</tr>
<tr>
<td>Anwesende - Witness(es):</td>
</tr>
<tr>
<td>Herr Kowatzick</td>
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**PRÜFLING (EUT) - EQUIPMENT UNDER TEST**

<table>
<thead>
<tr>
<th>Gerätabez. - Equipment:</th>
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<tbody>
<tr>
<td>Elektromechanischer Türverschluss - Electromechanical door lock</td>
</tr>
<tr>
<td>Modell/Typ - Model/Type:</td>
</tr>
<tr>
<td>Genius / A-Öffner (GEN AS*, GEP EP*, ZEM F10*)</td>
</tr>
<tr>
<td>Fertigungs Nr. - Serial No.:</td>
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<td># 1018143050907</td>
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**PRÜFUNG - TEST**

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<tr>
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<tr>
<td>04. - 06.06.2013</td>
</tr>
<tr>
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<tr>
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<td>EN 61000-6-3:2007+A1:2011</td>
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<td>EN 61000-6-2:2005</td>
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<td>EN 61000-3-3:2008</td>
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<tr>
<td>Details siehe Zusammenfassung - Details see test result summary</td>
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<tr>
<td>Bemerkungen - Remarks:</td>
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<tr>
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<tr>
<td>The test plan was presented.</td>
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<tr>
<td>Durchführung - Performed by:</td>
</tr>
<tr>
<td>Dipl.-Ing. Th. W. Stein</td>
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**PRÜFBERICHT - TEST REPORT**

<table>
<thead>
<tr>
<th>Identifikationsnummer - Identification No.:</th>
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<tr>
<td>FS-1306-238552-002</td>
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<tr>
<td>Datum des Prüfberichts - Date of Report:</td>
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<tr>
<td>10.06.2013</td>
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Last update: 01.08.2013