

# GENIUS

Elektronic door lock



**Contents**

**Intended use..... 2**

**Improper use..... 2**

**Safety notes..... 2**

**Description of device and functions..... 3**

**Switching the acoustic signal on and off..... 4**

**Locking and unlocking the door..... 5**

**Operating the system with optional external devices..... 6**

**Programming..... 7**

**Infra-red access keys ..... 8**

**Programming in the infra-red master key..... 9**

**Programming in infra-red access keys..... 9**

**Deleting infra-red access keys..... 9**

**Replacing the batteries..... 10**

**Disposing of batteries ..... 11**

**Malfunctions..... 11**

**Technical specifications..... 12**

**Liability..... 12**

## Intended use

- The GENIUS door lock is a special lock for locking and unlocking doors automatically.
- It is suitable for installation in timber, aluminium, steel and PVC entry 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 GENIUS door lock must be operated with a free-running cylinder compliant with the German standard DIN 18252. Alternatively a thumbturn cylinder can be used, but it should be noted that this will result in a loss of strength at the locking points.
- The GENIUS door lock 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 GENIUS door lock only when it is in a technically sound condition. Do not modify the unit's components in any way.
- Use the GENIUS door lock only with genuine KFV accessories.

## Improper use

- The GENIUS door lock must not be used with a cylinder with a fixed catch, as this will cause the main lock to jam when the key is removed.
- The GENIUS door lock 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 GENIUS door lock 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 GENIUS door lock 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.

## Description of device and functions

### Day/night mode

The desired mode (day or night) can be selected using the toggle switch on the GENIUS door lock.

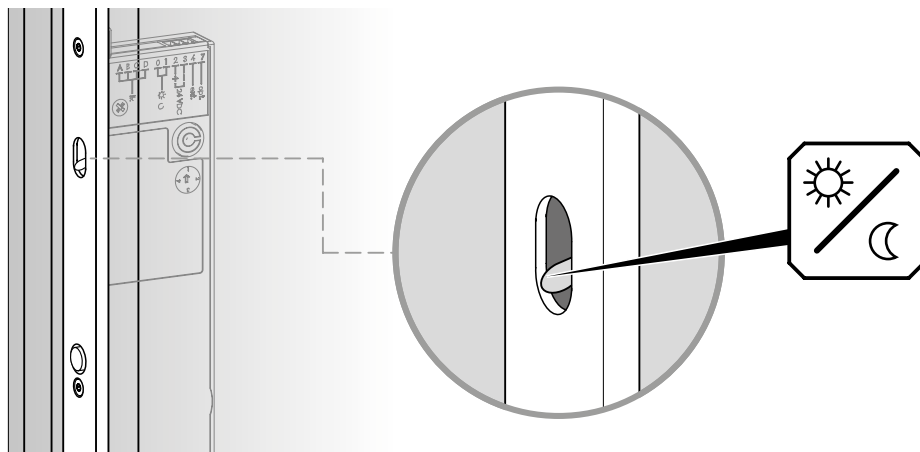


Fig. 1: Toggle switch for selecting day/night mode

### Day mode

Switch position up

- The door is held shut by the latch.
- To allow the door to open, the latch retracts into the lock.
- This mode is recommended for doors with heavy traffic.

### Night mode

Switch position down.

- The door is locked automatically after each opening.
- When the door is opened it is also unlocked automatically.
- The latch retracts into the lock for approximately 7 seconds. If the door is not opened during this time, it is locked again after these 7 seconds have elapsed.

**Note:** If the door needs to be locked (e.g. at night, or when the building is empty), night mode must be selected.

## Switching the acoustic signal on and off

In its "supplied" state, GENIUS beeps as it draws the latch electronically into the changeover function.

It emits a constant beep for as long as terminal 4 receives an "open" signal. In some cases this constant beep is undesirable, e.g. if the door needs to be kept unlocked to provide permanent access at certain times.

In this instance, GENIUS 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.) Switch on the operating voltage
- 5.) GENIUS now switches to programming mode (a sequence of beeps is heard)
- 6.) Press the "open" button, release it (for about 1 s), then press and hold it down once again.
- 7.) 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:

- GENIUS beeps as the latch is drawn into the changeover function
- GENIUS 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

### **⚠ WARNING**

Operating the handle during automatic locking or unlocking can place excessive strain on the lock and damage the main lock case or the GENIUS door lock.

- > Do not operate the lever handle during automatic locking and unlocking.

### Locking the door

In **day mode** the door can be locked as follows:

- Manually with the cylinder key
- Using an (optional) KfV infra-red access key
- Using an (optional) KfV fingerprint scanner

All of the above methods involve the engagement of all locking elements.

When the door is closed in **night mode**, it is automatically locked and all of its locking elements retract.

### Unlocking the door

The door can be opened manually using the cylinder key, or automatically by using an external access control system (handheld wireless transmitter, infra-red access key, transponder or fingerprint scanner).

If the door is fitted with a type CA/CB GENIUS lock, it can also be unlocked from the inside with the lever handle.

- › Press the lever handle down fully.
- › This causes all locking elements including the latch to retract.

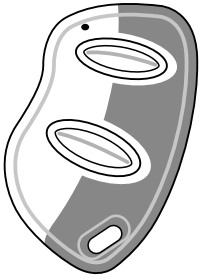
Important:

- To lock or unlock the door with the cylinder key, always turn it as far as it will go. The key must then be turned back some way before it can be removed from the lock.
- If the door does not open immediately following automatic unlocking, a signal will be heard for approximately 7 seconds.

In **night mode**, the door will then lock again automatically.

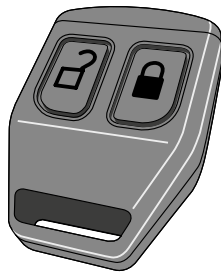
**Operating the system with optional external devices**

Handheld wireless transmitter



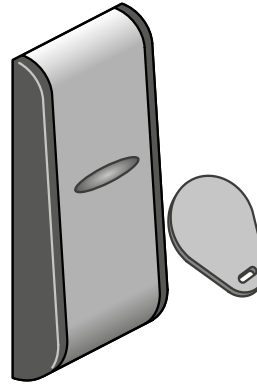
- unlocking/opening

Infra-red access key



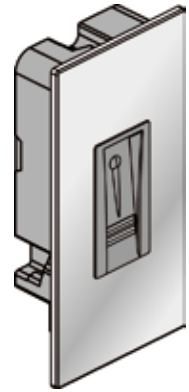
- unlocking/opening  
- locking  
- turning external system on/off

Transponder



- unlocking/opening

Fingerprint scanner



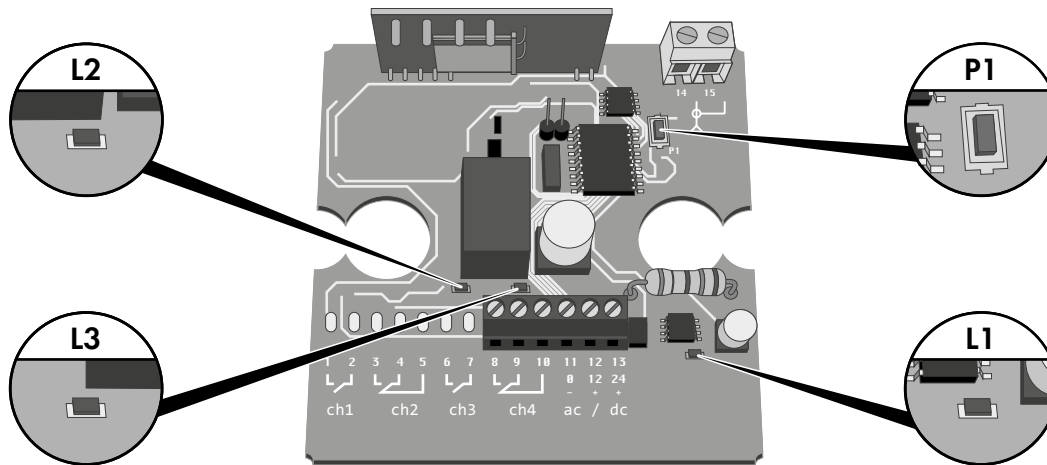
- unlocking/opening  
- locking  
- turning external system on/off



## 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** lights up three times.
- › You have now deleted all handheld wireless transmitters. The remaining handheld wireless transmitters must be programmed in again.

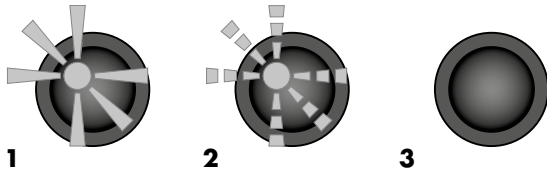
### Range between handheld wireless transmitter and receiver

Medium	Range without aerial	Range with aerial
Steel	approx. 2 m	approx. 5 m
Concrete	approx. 10 m	approx. 20 m
Timber, aluminium, PVC	approx. 20 m	approx. 30 m
Air	approx. 30 m	approx. 50 m

## Infra-red access keys

### Infra-red eye

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



1	Solid light	Door is open
2	Flashing	Opening/closing, or fault (double speed)
	Pulsing	External system is on
3	Off	Door is locked

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 GENIUS door lock. However, any number of GENIUS door locks 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.



Fig. 3: Infra-red master key

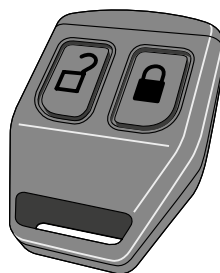


Fig. 4: Infra-red access key

### 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.

The "lock" button on the infra-red access key can also optionally be used to switch an external system (e.g. an alarm system) on and off.

### Locking the door and switching the external system on

- › Press the "lock" button. This locks the door.
- › Press the "lock" button again. This switches on the external system. The LED in the infra-red eye will flash in the form of pulses.

### Unlocking/opening the door and switching the external system off

- › Press the "open" button. If the external system was on, this will switch it off.
- › Press the "open" button again. This will unlock the door. The LED in 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 GENIUS door lock 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 GENIUS door lock 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.
- › 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.

## Programming in infra-red access keys

**Note:** Before the infra-red access key is programmed in, the infra-red master key must first be programmed in.

- › Retract all locking elements.
- › Open the door and hold it open.
- › 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 flash.
- › Hold the access key in front of the infra-red eye and press any button on it.
- › An sequence of beeps is generated to confirm that programming was successful.
- › To check that programming was successful, press the "open" button on the infra-red access key once more.

## 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.
- › 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, follow the "Fingerprint scanner access control" operating instructions.

## 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.

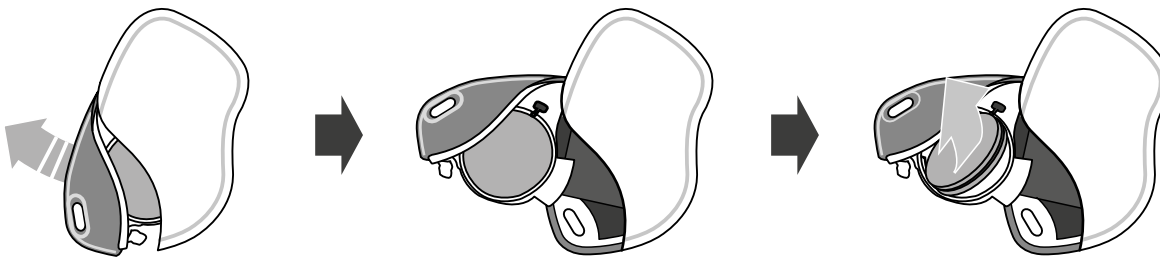


Fig. 5: Replacing the batteries in the handheld wireless transmitter

- › 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:** The infra-red access key will remain programmed in the same way as it was before the batteries were replaced



Fig. 6: Replacing the batteries in infra-red access keys

- › 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).

### Malfunctions

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

Malfunction	Possible causes	Action
The wireless receiver is not receiving a signal	<ul style="list-style-type: none"> <li>- Battery in handheld transmitter is too low.</li> <li>- Other systems (e.g. wireless headphones) are transmitting signals of the same frequency (433.92 MHz).</li> <li>- Range too small.</li> </ul>	Replace battery  Switch off other systems  (Fit wire aerial to wireless receiver)
The door does not lock	<ul style="list-style-type: none"> <li>- Door is not fully closed.</li> <li>- Door contact is misaligned.</li> <li>- Switch set to day mode</li> </ul>	Shut the door Check door contact Check switch
GENIUS locks when door is ajar	Lock face plate or door is pre-magnetised	Invert magnet on frame side (reverse polarity)
Not functioning	Circuit breaker in main fuse box has tripped	Reset circuit breaker
Acoustic signal (approx. 8 sec.); door does not lock	- Jam caused by foreign body or damage in lock area	Remove foreign body from lock area.
A short beep is heard	Locking action obstructed * 1 (stiffness, or jam due to failure to use free-running cylinder)	Confirm the fault by unlocking the door manually (using the cylinder key), pressing an external "open" button, or opening the door.

\* 1 If the door repeatedly fails to lock correctly, the locking action should be checked manually. To do this, use the cylinder key to lock and unlock the door with the door shut. It must be possible to turn the key through two full turns without pushing or pulling the door or the door handle. If a free-running cylinder has not been installed, the fixed catch in the cylinder will cause a malfunction in the GENIUS door lock when the key is removed from the lock.

Technical specifications	
Relative humidity	20 % bis 80 %
Ambient temperature in door	- 10 bis + 45 °C
Dimensions	Width 16 mm, length approx. 252 mm, depth 49 mm + width of face plate
Supply voltage	24 V DC max. 500 mA
Cable types	
Type	LIYCY
Ambient temperature, non-fixed	- 5 bis + 50 °C
Ambient temperature, fixed	- 20 bis + 70 °C

## 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 warranted – 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 under our own 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](mailto:dokumentation@kfv.de).

Nemko GmbH & Co. KG  
 Prüf- und Zertifizierungsstelle  
 Test and Certification Institute  
 Reetzstraße 58  
 D-76327 Pfinztal  
 Tel.: +49 (0) 72 40 / 63 -0  
 Fax: +49 (0) 72 40 / 63 -11



Deutsche  
 Akkreditierungsstelle  
 D-PL-18175-01-01



EMV  
 Testzentrum

**PRÜFBERICHT - TEST REPORT**  
 Elektromagnetische Verträglichkeit (EMV) - Electromagnetic Compatibility (EMC)

<b>ANTRAGSTELLER - APPLICANT</b>	
Firma - Company:	KFV Karl Fliether GmbH & Co. KG
Anschrift - Address:	Siemensstr. 10 D - 42551 Velbert
Anwesende - Witness(es):	Herr Kowalzik
<b>PRÜFLING (EUT) - EQUIPMENT UNDER TEST</b>	
Gerätebez. - Equipment:	Elektromechanischer Türverschluss - Electromechanical door lock
Modell/Typ - Model/Type:	Genius / A-Öffner (GEN AS*; GEP EP*; ZEM F10*)
Fertigungs Nr. - Serial No.:	# 1018143050907
<b>PRÜFUNG - TEST</b>	
Anlieferung Arrival of EUT:	04.06.2013
Meßtermin(e) Date of measurement:	04. - 06.06.2013
Prüfungsgrundlage Standards:	<u>Störaussendung - Emission:</u> EN 61000-6-3:2007+A1:2011 Klasse B - class B EN 61000-3-2:2006+A1:2009+A2:2009 EN 61000-3-3:2008
	<u>Störfestigkeit - Immunity:</u> EN 61000-6-2:2005
Ergebnisse - Results:	Anforderungen erfüllt - Passed Details siehe Zusammenfassung - Details see test result summary
Bemerkungen - Remarks:	Ein Prüfplan wurde vorgelegt. The test plan was presented.
Durchführung - Performed by:	Dipl.-Ing. Th. W. Stein
<b>PRÜFBERICHT - TEST REPORT</b>	
Identifikationsnummer Identification No.:	FS-1306-238552-002
Datum des Prüfberichts Date of Report:	10.06.2013
bearbeitet von - Provided by:	Dipl.-Ing. Th. W. Stein
	Prüfer - Person responsible
	 Unterschrift - Signature
überprüft von - Approved by:	Dipl.-Ing. P. Lukas
	Prüfer - Person responsible
	 Unterschrift - Signature

QM-V-5.10-2 d-e / Rev 6.10

Dieser Prüfbericht besteht inkl. diesem Deckblatt aus 53 nummerierten Seiten und darf ohne schriftliche Genehmigung des Prüflabors nicht auszugsweise vervielfältigt werden. Die Prüfergebnisse beziehen sich ausschließlich auf den oben aufgeführten Prüfung (Typ-Prüfung). Rechtsgültigkeit besitzt nur das handschriftlich unterschriebene Original.  
 This report consists of 53 numbered pages including this page and shall not be reproduced except in full, without the written approval of the testing laboratory. The results are related to the equipment under test only (type-test) The English version is a translation. In case of doubt you should follow the original German text. Legal validity is given by the handwritten signed document only.

# KFV

A company of the SIEGENIA GROUP

KFV Karl Fliether GmbH & Co. KG  
Siemensstraße 10  
42551 Velbert  
GERMANY

Phone: +49 2051 278-0  
Fax: +49 2051 278-167  
info@kfv.de  
www.kfv.de



You can find address details for our  
international sites at: [www.siegenia.com](http://www.siegenia.com)

SIEGENIA worldwide:

**Austria** Phone: +43 6225 8301  
**Belarus** Phone: +375 17 3121168  
**Benelux** Phone: +32 9 2811312  
**China** Phone: +86 316 5998198  
**France** Phone: +33 3 89618131  
**Germany** Phone: +49 271 39310  
**Great Britain** Phone: +44 2476 622000

**Hungary** Phone: +36 76 500810  
**Italy** Phone: +39 02 9353601  
**Poland** Phone: +48 77 4477700  
**Russia** Phone: +7 495 7211762  
**South Korea** Phone: +82 31 7985590  
**Switzerland** Phone: +41 33 3461010  
**Turkey** Phone: +90 216 5934151  
**Ukraine** Phone: +380 44 4637979

Contact your dealer: