Smart Buildings Product Brochure





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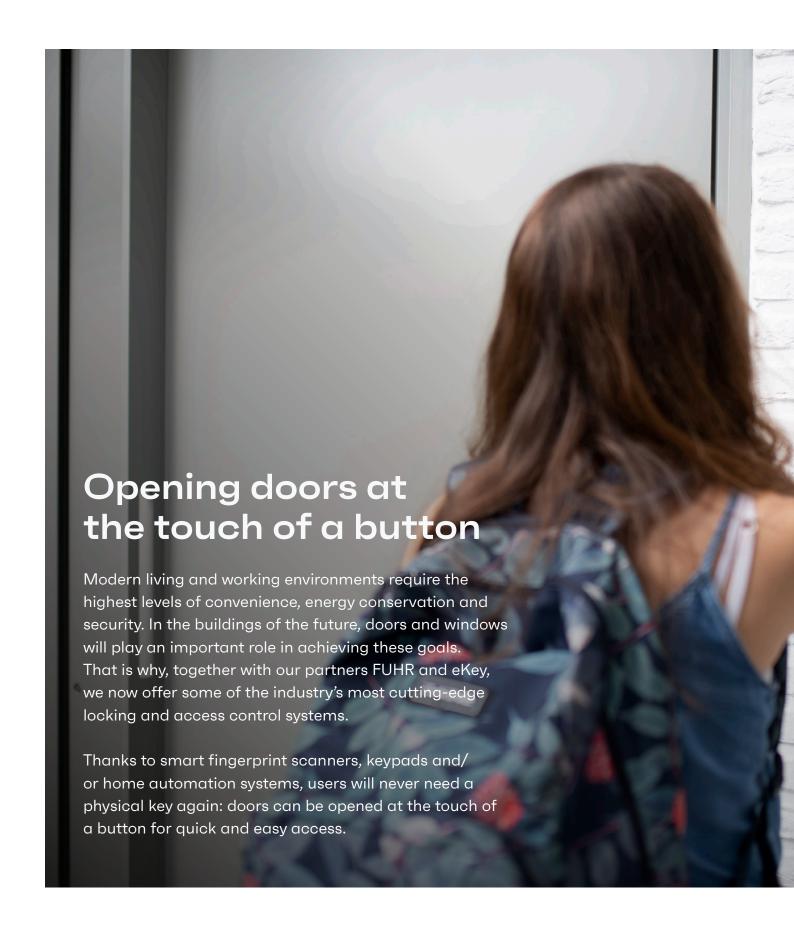
Introduction

Life, more comfortable than ever

Reynaers Aluminium has always been synonymous with quality materials, cutting-edge design and lifelong comfort. With the seamless integration of smart building solutions into our products, we now add top-notch smart technology to the mix to help make life more comfortable than ever.

Our windows and doors are compatible with the industry's leading smart building systems. Together, they provide users with a new level of comfort, security and peace of mind. Thanks to a range of intelligent solutions, our windows and doors do the work for you at the push of a button. No need to worry about keys anymore: the smart system allows you to manage access to your home or building through a fingerprint scanner or app. Moreover, you can check whether doors and windows are properly closed from a distance and have packages delivered inside safely while you are away.

Automated locking systems for doors





Automated locking systems

Automated locking systems for Reynaers Aluminium doors

FUHR automated locking systems offer a significant upgrade in terms of convenience, security and sustainability to help make daily life easier and more comfortable.

The FUHR solutions can be easily integrated into our Reynaers Aluminium door systems. Choose between the autotronic - a partially mechanical, three-point lock with a burglaryproof RC 2 qualification - and multitronic system - a fully electrical, seven-point lock with an RC 3 qualification - to fulfill all your safety needs.

FUHR multitronic 881

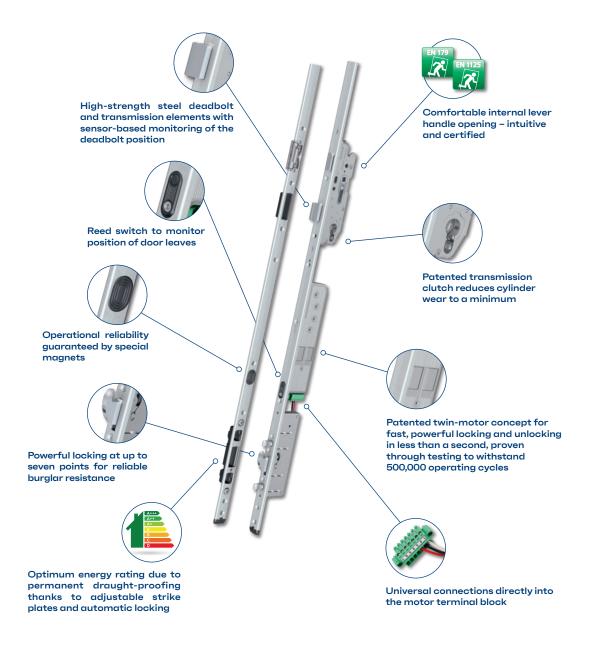
Automated locking systems



The advantages at a glance

- Reliable twin motor: strong and fast locking and unlocking thanks to two parallel high-performance motor drive mechanisms.
- Energy savings: our doors always close swiftly and tightly, keeping warmth in (or out) when you need it most. Your energy bill will thank you!
- Secure locking of main entrance doors, apartment doors, and back doors.

- Suitable for burglary-resistant doors in accordance with EN 1627 RC 2 and RC 3.
- Compatible with a wide variety of access control systems.
- Plug-and-play solution: complete kit with pre-assembled connectors seamlessly integrated into the door.
- Unique lock technology: integrated panic functionality and premium quality steel deadbolt and latch.



FUHR multitronic 881

Automated locking systems

Application

Multipoint locking: the sustainable solution

Multipoint locking ensures optimal thermal insulation to keep heated or cooled air inside any building. This way, smart locking systems help you conserve energy, save on costs and create a comfortable home or working environment.

Sensory monitoring of the door leaf and bolt position is included as standard. The locking status can be verified and displayed reliably at any time for both residential and commercial buildings. Connection points for alarm systems and/or building management systems are also included as a standard feature, taking door security to the next level.

Well-equipped to fend off uninvited guests

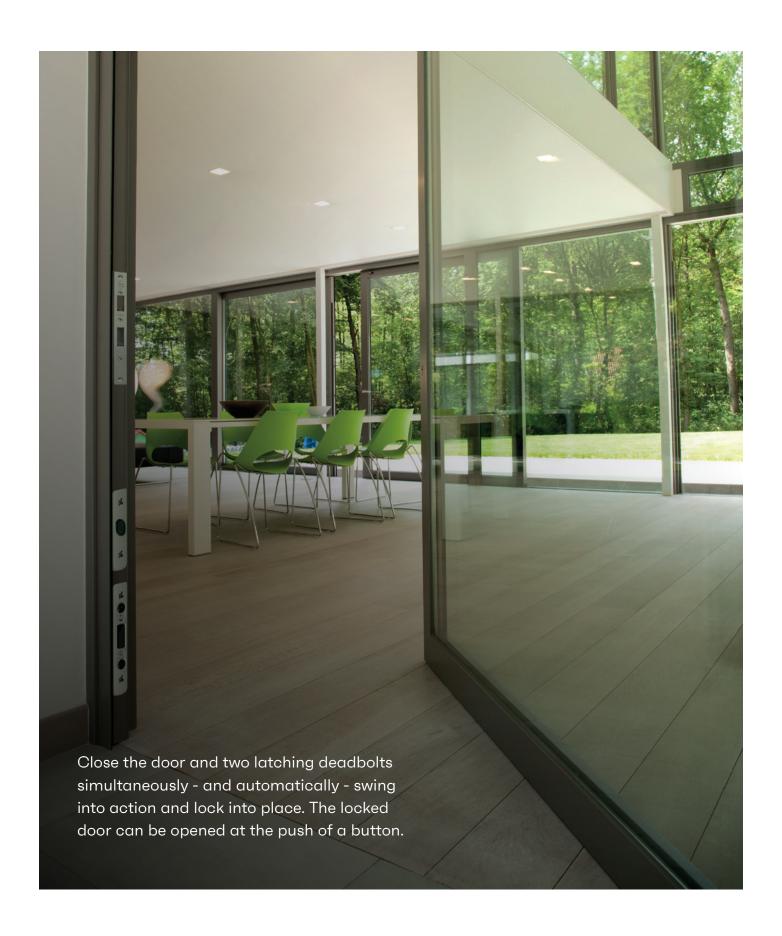
Front and side doors offer a point of entry not just for your family and friends, but for unwanted guests too. Burglars are very much aware that many entrance doors are insufficiently locked - or not at all - during the day, giving them ample opportunity to take advantage. Luckily, FUHR's multitronic 881 system locks doors automatically for maximum security.





FUHR autotronic 834

Automated locking systems



The advantages at a glance

- Convenient and powerful motorised opening via access control systems.
- Optimal security: doors lock automatically and the additional latches become sturdy deadbolts the moment the door is shut.
- Deadlocking latch with 20mm throw and counter-pressure device.
- High-quality materials ensure a long product life.
- Increased thermal insulation due to constant gasket compression from three locking points. This results in lower energy losses while possible door distortion or warping is permanently prevented.
- The modular system makes it suitable for a wide range of Reynaers Aluminium doors.

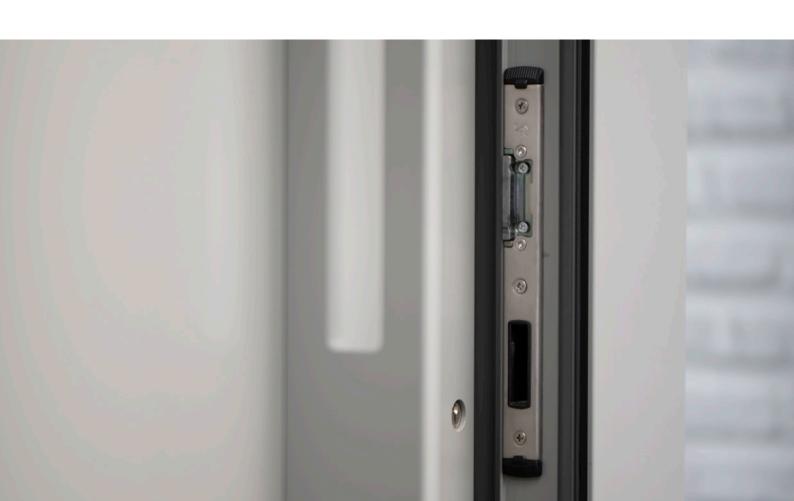


Intelligent locking options

In certain situations, you may need to deactivate your locking system temporarily. Two optional functionalities are available to do so. When the **day latch function** is engaged, the door will only be secured by the latch. This daytime solution is perfectly suited for frequently used doors in commercial or apartment buildings where controlled access is required. The system can be activated via a timer or a switch.

When the **permanent-open function** is activated, both the latch and deadbolt are permanently retracted. Unimpeded access in both directions is possible without access control. This solution is often used in shops and other buildings frequently visited by the public. Residential settings where users might want to step outside briefly without locking the door heavily benefit from this type of lock as well. Looking for even more security? With an additional door closer, doors automatically shut without locking.*

* Only required for FUHR Autotronic 834.



Access control for automated locks

The multitronic 881 and autotronic 834 motorised locking systems are based on intelligent control technology that combines convenience and security effortlessly. Pre-configured for a range of system requirements, this solution is perfectly suited for use in residential and non-residential properties where access flexibility is a must.

The multi-functional controller allows users to control a number of different functionalities:

- Access control systems such as fingerprint scanners and keypads - see page 14
- Intercom
- Building management systems
- Alarm systems

- Control pulse for electrical swing door openers
- Day latch function or permanent-open function



Fingerprint scanners and keypads for smart and flexible access

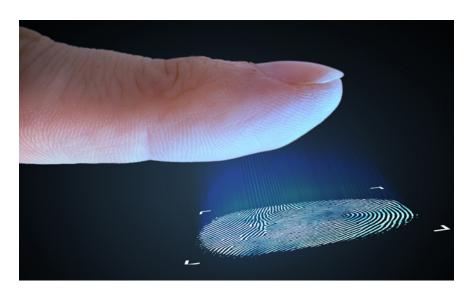
Thanks to the eKey product range, fingerprint scanners have taken centre stage as the ideal access control mechanism. Keys have become redundant as you open doors with a fingertip's touch - an innovative approach that offers a number of benefits.

The advantages at a glance

- No more lost or stolen keys
- Never again locking yourself out
- No transfer of access authorisation possible, like with keycards or keys
- The eKey software learns with every use, recognising the growth of children's fingers as well as changed user habits and minor injuries
- No worries, receive a message when the door is opened or allow access from remote.



Highest security



EKey guarantees the highest security standards to protect users from misuse and unauthorised access. For example:

- EKey fingerprint scanners are secured against false positives with a false acceptance rate of 1:10 million. This is 1,000 times more secure than a four-digit code of an ATM card.
- The eKey fingerprint scanner sensor technology can distinguish between living and dead tissue with RF sensor technology.
- EKey fingerprint scanners and eKey control units are linked via an encrypted data connection.
 Attempts at tampering, such as short-circuiting connecting cables, do not trigger an opening impulse. Doors stay shut as long as you want them to.
- dLine secure internet servers are located in Austria working with encrypted data communication only. And no personal data is stored online.

Fingerprint dLine

Access contro

With its elegant stainless steel or black finger guide, the eKey dLine fingerprint scanner is specifically designed for easy and seamless integration in Reynaers Aluminium doors and door pulls. Thanks to its compact dimensions, the fingerprint scanner can be discreetly integrated into the door itself, the door frame, or even the wall.

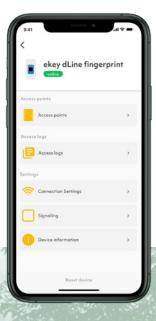
The eKey fingerprint scanner is equipped with intelligent software that communicates with the control unit through an encrypted data connection. Moreover, it updates automatically, recognises changes in user habits and learns with every use.





dLine stainless

dLine black



Thanks to the eKey control unit, the eKey dLine fingerprint scanner can now be operated through the new eKey byonix app as well. That way, users can open doors remotely with the help of their smartphone device. You can also receive push notifications on your phone that let you know when your loved ones have arrived home safely. If you want to grant exclusive access, you can assign permissions, different roles and even time slots for all your family members, staff members or guests. Finally, connect the finger scanner to your virtual assistant (e.g., Amazon Alexa) and enjoy ultimate access comfort at all times.

Fingerprint Integra

Access contro

The integra fingerprint scanner combines all the advantages of a classic fingerprint scanner with the functionality of RFID technology.



Integra white

Integra stainless

Integra black

The eKey integra home fingerprint scanner with RFID is a biometric sensor terminal for the registration of fingerprints by means of an RF line sensor. Up to 99 unique fingerprints and 99 cards can be stored. The fingerprint scanner doubles as an RFID terminal that can be used with RFID cards and can identify authorised users to subsequently open building doors, workplace doors, garage doors, etc. This versatile access control system can be installed on any type of building, both at residential and at office buildings. Moreover, the eKey integra RFID home fingerprint scanner is designed for fixed mounting on immobile components such as masonry, and for use in protected outdoor areas.

Keypads Access control

The eKey keypad is equipped with intelligent software that transmits information to the control panel using encrypted communications. EKey has placed special emphasis on design and the use of high-quality materials, for an intelligent solution that looks good and can be easily mounted right next to the door.

The eKey keypad code pad offers up to 99 different four- to eight-digit programmable number sequences - plenty enough for each user in the building to get their own access code. Because of the integrated backlighting, users can quickly and easily insert their own personal code - even in the dark. And if a user or guest is no longer permitted access to the building, their code can be deleted in seconds.





Keypad black

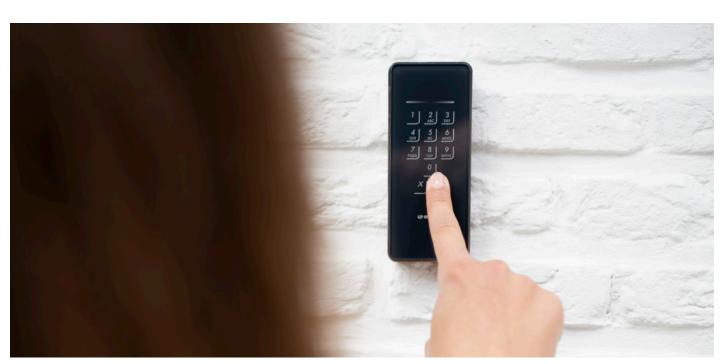
Keypad white



Keypad Lite

For secondary entrance applications and projects with a higher number of users, we provide an economic keypad as well. This single-entry standalone keypad with easy plug-and-play setup comes with an anti-tamper alarm and is available in a black and stainless steel colour.

The Keypad Lite can contain up to 10 temporary codes with limited use for visitors.

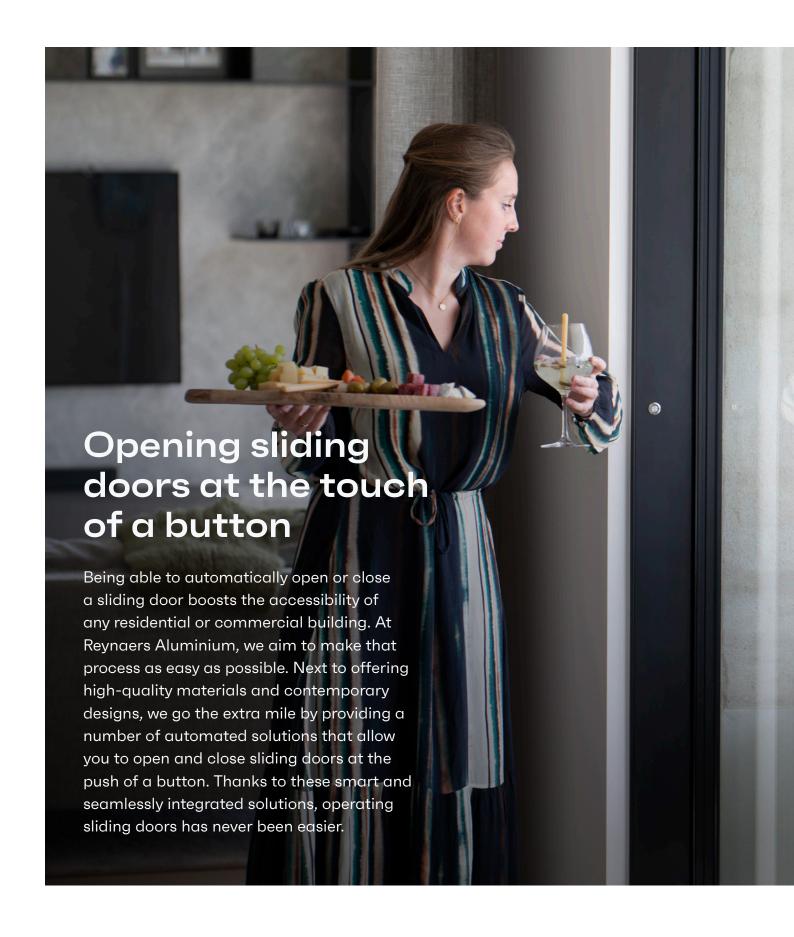


Technical overview

	dLine	Integra RFID	Keypad
False Acceptance Rate	1:10,000,000/FRR 1: 100	1:10,000,000/FRR 1: 100	NA
Dimensions (WxHxD)	22.3 x 46.8 x 16 mm	43.6 x 89 x 17.3 mm	51.7 x 97.1 x 21.4 mm
Power consumption	approx. 1W	approx.1W	approx.1W
Supply Voltage	12-24 VDC	10-24 VDC	8-24 VDC
IP code	IP56	IP54	IP54
Recommended mounting height	155 cm	155 cm	NA
Memory	Up to 100 different users can be stored, data is retained in the event of power failure	99 unique fingerprints can be stored, data is retained in the event of power failure	Up to 99 different four- to eight- digit codes can be programmed simultaneously
Temperature range	-25 °C to 70 °C	-25 °C to 70 °C	-25 °C to 70 °C
Activated by	Fingerprint, app	Fingerprint, RFID	Code
Colors	Black or stainless	Black, white or stainless	Black or white



Automated sliding doors





Concealed Motorised Solutions

All automated access solutions for sliding doors include concealed motors that can be seamlessly integrated into our windows and doors to safeguard the design of the building. That way, users can both enjoy easy access and the unique minimalist design of our HiFinity, MasterPatio and ConceptPatio 155 (-LS) sliding doors.

HiFinityMotorised sliding system

The ultra-slim design of HiFinity sliding doors creates large transparent surfaces with a sleek and elegant design. Looking for the perfect finishing touch? An integrated concealed motor allows users to open the sashes at the push of a button, or via a connected home or building automation system. A separate manual handle is no longer required: the high-performance motor guarantees optimum convenience during use and offers a safe and reliable access solution.

With the HiFinity's electronic lock, you will never have to worry about uninvited guests again. The door locks and unlocks thanks to a robust bolt and hook operated by a button or via your smart home or building system. In addition, the integrated alarm feedback helps ensure ultimate peace of mind.

The HiFinity motor is available in a 50W version that can move sashes of up to 425 kg, and a 70W version that supports weights of up to 750 kg.



MasterPatio Motorised sliding system

Crafted by Masters, the MasterPatio sliding system takes your home to the next level. Beauty and performance come together as this spectacular floor-to-ceiling solution offers Passive House insulation levels to keep you warm and safe all year long. MasterPatio is the sliding system of choice for all our partners and customers. Its recycled components and excellent energy performance make this aluminium solution an ideal sustainable upgrade for any building project.



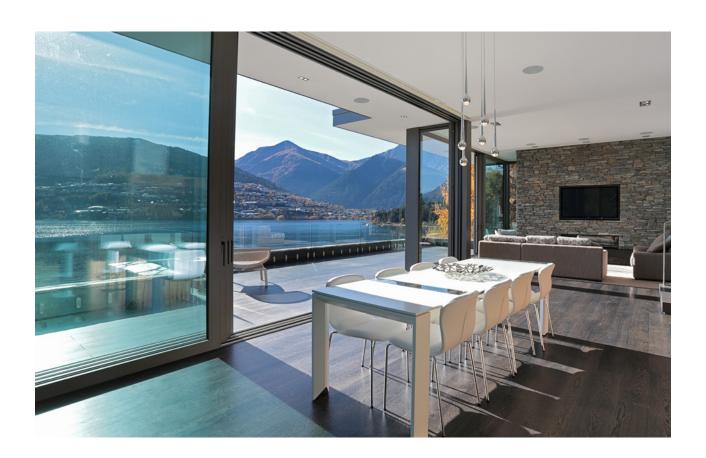
Explore endless architectural options as the MasterPatio is fully compatible with our MasterLine 8 windows and doors range. Reaching heights of up to 3.6m, this sliding system neatly integrates into building façades to provide you with lots of light and amazing panoramic views.

A motorised version is newly available for MasterPatio's monorail lifslide variant, with an additional built-in 50W motor to lift vents of up to 400kg. When the vent is closed, it automatically locks itself in a second. User-friendly design has never looked better.

ConceptPatio 155 Motorised sliding system

ConceptPatio 155 (-LS) is a premium insulating lift-slide system designed to deliver maximum ease of use. For added convenience, the lift-slide door can be automated with a concealed-motor solution that allows users to open the sashes at a push of a button, or through their smart home or smart building app.

The lift-slide version of the ConceptPatio 155 has an additional built-in 50W motor that can lift vents of up to 400kg effortlessly. When the sash is closed, it automatically locks itself, giving airtight security to all.



The HiFinity sliding system, MasterPatio, and ConceptPatio 155 (-LS) lift-slide system

are equipped with pressure-sensitive emergency detection to keep you, your children and your pets safe at all times. When feeling even the slightest resistance, the doors stop immediately and the motor is automatically reversed to free any obstacles. Moreover, a built-in battery pack makes sure sashes can always be opened, even in case of power failure.

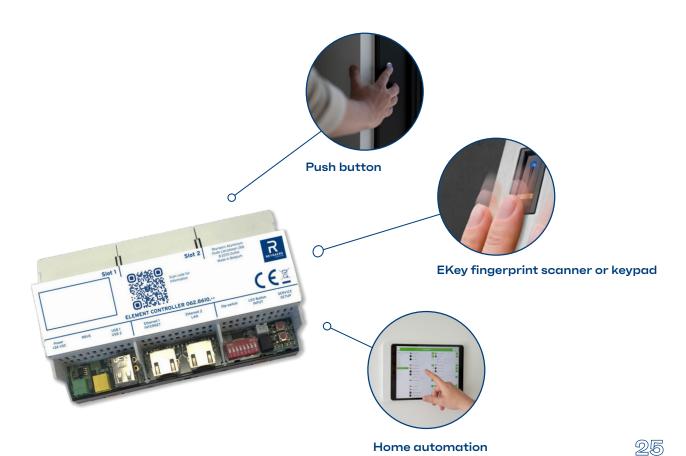


Access control for sliding doors

Element controller

With the element controller, you can now easily integrate smart access control for sliding doors into your home and building automation systems. Open and close multiple motorised with ease, whenever you want to. You can even set pre-defined sash states, close specific sashes, open all sashes at once, and much more. The user-friendly system is designed to make the setup and control of multiple sliders very intuitive. That way, you can operate the motorised vents according to each resident's individual needs. In addition, an anti-collision safety feature prevents you, your children or your pets of getting trapped between the moving vent. Nothing is left to chance.

- Safety first: real-time position-based anti-collision control
- Intuitive operation of multiple sliding sashes
- Easy handling of multiple vents via single control point for multiple motorised sashes
- · Unified control thanks to full integration in home automation systems



Natural ventilation

Natural ventilation and creating a healthy indoor environment has never been this topical. Simply opening a window helps to bring in some fresh air and prevents indoor overheating by passive cooling. At Reynaers Aluminium, we believe that motorised windows can improve indoor air quality and your comfort in an economical and impactful way.

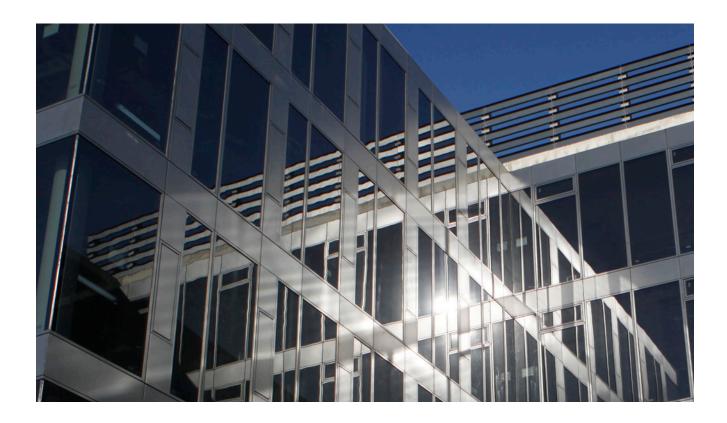
To improve your work and living conditions, we offer premium user-friendly solutions that work as either standalone units, or linked to your smart home network or HVAC (heating, ventilation, and cooling) systems. And just like any other of our Smart Building solutions, Reynaers Aluminium motorised windows for natural ventilation are always subtly integrated, fully connected and safe to use.

E-Invisistop

E-Invisistop is a comfort motorisation solution for windows that are not that easy to reach. A single motor (060.6770.—), integrated and concealed into the vent, helps you to tilt and (un)lock the window with utmost ease.

- For concealed, bottom-hung windows
- For inward opening windows with 175mm and 200-600m³/h air changes
- Ideal for comfort opening at residential buildings





Ventilation vent

Create an optimal flow of fresh air and a healthy indoor climate with our motorised ventilation vents. The concealed vents' narrow design helps to offer a breath of fresh air while ensuring full safety at all times. This aesthetic solution is both easy to install and easy to integrate, as you can adjust the end pieces for optimal fit and paint them to match the colour of your profiles.

Speaking of seamless integration: our ventilation vents are fully compatible with the MasterLine 8 and MasterLine 10 windows and doors, and the MasterPatio sliding system. As a result, you can create incredible floor-to-ceiling façades that feature nothing but Reynaers Aluminium solutions.

When it comes to motorised solutions that anyone can operate, safety is key. Thanks to our ventilation vents' finger pinch protection feature, even children can operate the system in full safety. The vents' fall-through front grid protection ensure no-one falls out of the window, even on higher building levels. Furthermore, this burglar proof solution protects against rain and mosquitos to make your life that more enjoyable.

- Concealed motorised ventilation vent, operated from the inside
- For inward opening, 90° side-hung windows with 250-1500m³/h air changes
- Burglarproof solution with fall-through front grid protection
- · Ideal for residential, natural ventilation

Additional access control

Magnetic contacts

Magnetic contacts are your certified solution for reliable alarm feedback. Activate you smart home, security, and HVAC (heating, ventilation, air-conditioning) systems thanks to this integrated access control feature.

How does it work? An interruption of the reedcontact will trigger an alarm to go off. Based on the status of your vents (open or closed), any connected system will activate automatically to help you reduce heating or cooling loss in an instant. Thanks to magnetic contacts by Reynaers Aluminium, saving energy has become that much easier.



Our magnetic contacts comply with various international standards and certificates:

- EN 50131-2-6 Grade 2, Class IA or IIIA
- INCERT B-582-0013
- VdS G116504 or G199523, Class B
- SBSC 9-216, Class 1/2, F&P, FGS

This innovative access solution is available for Reynaers Aluminium doors, sliding doors, and windows. Reach out to your local sales contact person for more information.









