

AUTOMATIC DOORS



Automatic Doors - RECORD STA 21

Record system 21 technologies for light to medium applications



***“Silent
Safe
Smooth”***

The Essences of
Automatic Doors



Product of Switzerland

RECORD STA21 - remarkably inconspicuous

The Record STA21 is designed to meet the requirements of light and medium-heavy sliding door applications. Available in standard single and twin leaf sliding models, in classic or telescopic versions.

Benefit form record system 20 cutting edge technologies

The majority of the record STA21 components are taken from the famous record system20, which has a thoroughly proven track record in global markets, but fitted with smaller, lighter electrical motors and a specially modified control.

The record system 20 actively communicates between operator, sensors and remote control, enabling constant monitoring of the status of individual components, further enhancing their functionality, safety and security. The system pay particular attention to ensure their long, trouble-free life. Together with these core priorities of product development, it is the carefully thought-out details that make Record's door system so popular among customer.

By pre-defining door movements, unnecessary triggering of opening impulses can be eliminated. Undersirable opening movement such as self-triggering caused by movements of the installation's own door leaves can be eliminated entirely, thanks to system 20's self-learning capabilities.

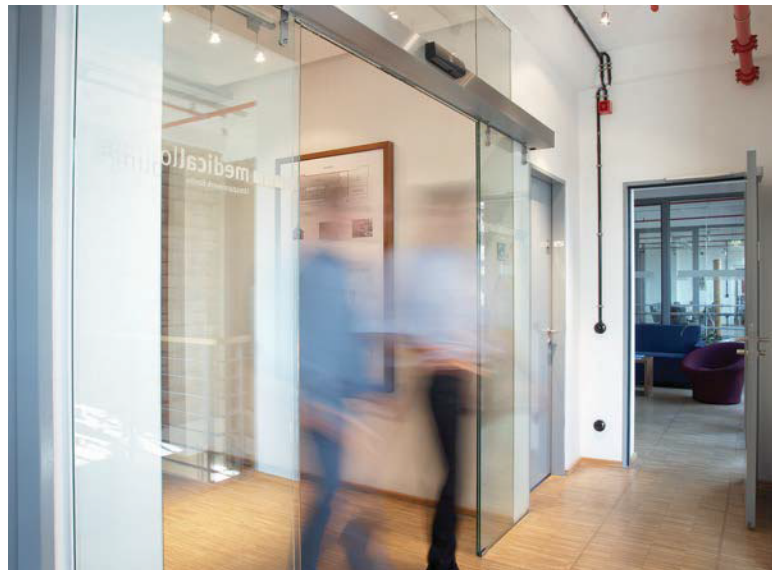
Responsible for the whisper-quiet operation typical of record products is our refined gear and roller technology, augmented by profile end guides and parts made from special low-noise plastic.

Tastefull Design

All applications share the same profile system, which features clear, elegant lines, and an attractive overall design. These many design options allow our door sytem to be integrated equally harmoniously in a building, or become a system feature.

Approved for highest levels of safety and security.

The Record STA21 product line fulfils all relevant European norms and standards, including DIN18650, EN16005 and EN ISO13849.



D-STA 2 leaves



D-STA 2 leaves





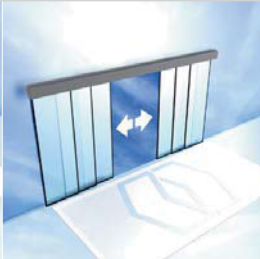


E-TSA 2 leaves



record slide bar operation reduces assembly time and installation

RECORD STA21 - applications

	record STA 21 – standard sliding doors (STA)		record STA 21 – telescopic sliding doors (TSA)	
				
Door models	E-STA 1 leaf	D-STA 2 leaves	E-TSA 2 leaves	D-TSA 4 leaves
Opening width	800 – 2000 mm	800 – 2500 mm	800 – 2500 mm	1440 – 3000 mm
Max. height of passage	2500 mm	2500 mm	2500 mm	2500 mm
Max. door leaf weight	1 x 120 kg	2 x 75 kg	2 x 80 kg	4 x 50 kg
Recommended application	light duties in tight spaces	Functional entrance with large entrance width	Maximum entrance width with tight spaces	Elegant entrances with large entrance widths

Designed for light to medium-heavy door applications

Based on the Record syste20, the Record STA21 has been modified to meet the requirements of light to medium-heavy door applications. Both have the same system, enabling the interactive exchange of the information between control, sensors and electronic remote control unit.

The most important functions:

The 32bit microprocessor control enables a wide variety of operational modes and functions. The mode of operation is selected intuitively using the BED-D, electronic remote control; the display features text in the language of your choice. The convenient and user-friendly BDE-D remote control can also be used to set or modify application-specific door parameters such as opening and closing speeds, opening widths for reduced opening, duration of open times, etc. Alternatively, parameter setting can also be done mechanically using the robust, key operated switch.

Safety and security equipment

The Record STA21 can be fitted with motorized bolt locking. Fitting security floor rails with extended blades can further enhance burglar protection levels.



D-STA 2 leaves



E-STA 1 leaf

RECORD peripheral equipment for efficient interactive communication

The reason Record products rarely malfunction is the fact that Record is one of the few manufacturers of automatic doors that develops and makes both the hardware and software found in our control and sensor devices. This enables us to implement the improvements made by our developers and engineers in the most effective way possible by allowing the coordination of individual improvements on an on-going basis.

Developed and manufactured entirely in-Switzerland

When analysing its immediate environment, the RAD 290 motion detector permanently communicates with the control device. The field of the 24GHz radar-equipped motion detector is defined electronically, allowing it to eliminate previously acquired door movements. The detector is set up to distinguish between traffic moving towards the entrance and across it.

The RIC 290 sensor device uses both radar and infrared technologies. It is equipped with both motion and presence detectors to ensure optimal safety and security during opening and closing. The convex system of lenses enables individual light sources to be collected and processed. The device actively communicates with the door control, eliminating door movements and interference caused by traffic moving across the entrance.

Remote control unit with text display

The electronic remote control device BDE-D is equipped with an illuminated display and features user-friendly, highly convenient menu navigation. Several operational modes are available to program door functions. The BDE-D is available in standard and slim-line models, and is also available with a key-operated switch.

Sensors



RIC 290



RAD 290



RIC 290 / RAD 290 flush-mounted model

Remote control units



BDE-D with surface-mounted housing



BDE-D with key-operated contact



BDE-D slim-line (44 x 92 mm)



Mechanical with key-operated switch

	record STA 21 – standard sliding doors (STA)		record STA 21 – telescopic sliding doors (TSA)	
	E-STA 1 leaf	D-STA 2 leaves	E-TSA 2 leaves	D-TSA 4 leaves
Operator dimensions	with cladding 194 x 108 / 150 mm without cladding 157 x 108 / 150 mm		with cladding 259 x 108 / 150 mm without cladding 222 x 108 / 150 mm	
Door movement	0.5 m/s	0.7 m/s	0.5 m/s	0.7 m/s
Mass				
Power supply	230 V / 50 / 60 Hz / 100 W			
Power consumption	100 W in operation / 25 W in idle mode			
Ambient temperature	-15°C to +50°C			
Remote control	Electronic with illuminated display (BDE-D)			
Operational modes	<ul style="list-style-type: none"> Automatic operation Continuously open Manual operation 		<ul style="list-style-type: none"> One-way traffic Locked 	
Programmable functions	<ul style="list-style-type: none"> Customer-specific door parameters Control lock Bell contact 		<ul style="list-style-type: none"> Emergency opening and closing (programmable parameters) Energy-saving function (automatic entrance widening TOWA) 	
Options	Sensor, safety and security <ul style="list-style-type: none"> Bolt locking device (VRR 20) RIC 290 multi-purpose sensor RAD 290 motion detector Floor safety rail Finish profile (burglar-resistant) Floor lock Key operated switch SSK CO48 escape route door system (France) Protective screen 		Additional equipment <ul style="list-style-type: none"> Optical locking display Emergency-open button Manual unlocking inside and outside of door Battery for emergency operation during power failure Locking device surveillance Extended functions module (FEM) for optional accessories Detachable operator housing 	
Assembly variants	<ul style="list-style-type: none"> Lintel-mounted, free standing or on the ceiling 			

Automatic Doors - RECORD STA 20

Trend - setting automatic door system for most application



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Automatic sliding doors system

Fortress Land Door Hardware

Record System 20 - Features

The Record system 20 is the automatic door system featuring interactive communication, simplified commissioning, intuitive control and greatly enhanced operational safety and reliability.

Qualities

The record sytem 20 supplies the basis of our automatic door drives. It enables us to provide a wide range of models for the market, all of which are based on this system and use the same component, modified to suit the needs of the individual customer. The result is quicker assembly and lower service and maintenance costs.

The record system 20 fulfils 2006/42/EG industrial guidelines for machine, DIN 18650 as well as meeting all relevant national and international norms and standards.

Standard Applications

The Record system 20 covers practically the entire range of applications single and twin leaf standard sliding doors, two and four leaf telescopic sliding doors, curved and round sliding doors, record's original angled sliding doors, as well as space-saving folding doors: all these are based on the record system 20.

Special Applications

The record system 20 range of products is also available for escape routes or specially equipped for specific applications.

Benefits

The record system 20 is the very latest generation in automatic door system. In addition to the qualities for which record has become legendary. i.e. exceptionally low-noise operation and typical Swiss quality, the innovative features of the record sytem 20 make it the market leader from the technological point of view.

Maintenance and inspection

Direct from factory and officially tranined overseas, our skilled engineers and service technicians make sure the customer get the best of it.

Service and maintenance contracts, tailor-made to suit the needs and circumstances of the customer, ensure that your installation functions smoothly and retains it's value for many.

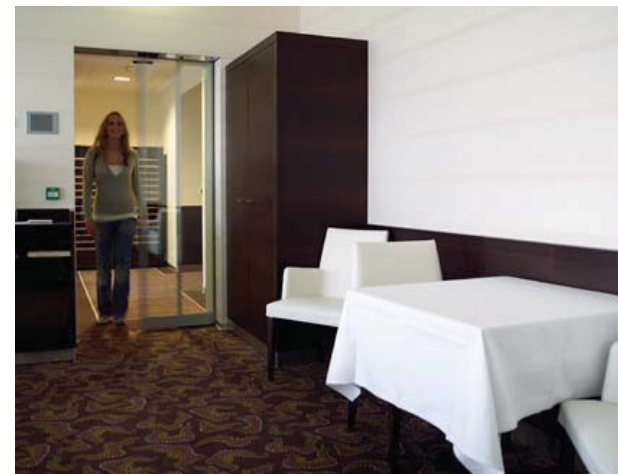
Our hotline staff are ready to provide advice and practical support: which guarantees rapid support for you and reduces unnecessary waiting time.



Offices & Retail shop (noiseless advantages)



Offices & Retail shop (safety & smooth advantages)



Restaurants with telescopic (easy at tough space)



Automatic folding sytem where no space for sliding



Round and curved automatic doors



Cornered automatic door

Record system 20 - Qualities

The Record system 20 enables the construction of a vast range of door models. Designed using modular construction principles, it can be adapted to suit the widest range of conditions and yet is largely based on the same components. This shortens installation time and reduces service and maintenance costs.

Mechanism

The absence of noise is the most striking feature of record automatic doors. Our combination of short, low-momentum toothed belts, rollers made from hard-wearing, low-noise plastic, acoustically decoupled running tracks, guide pulley wheels with ball bearings and door leaf guides with specially developed guide profiles all attribute to an exceptionally quiet running door.

Electronics

The record system 20 components can communicate with one another interactively, which among other things, enhances safety and security. The ability of drive, sensors and remote to communicate enables continuous monitoring of component status. The operational status of the door system and its individual electronic components also continuously undergo plausibility checks.



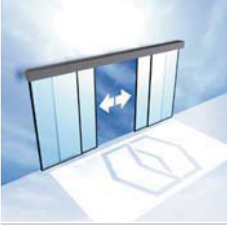


Doors can be operated using a remote control featuring a graphic display with background lighting, and easy-to-use, menu-led navigation with text in the language of your choice; if required, an additional key operated switch is available.

Design

Drive unit heights for both the normal, DUO and RED versions are available in either 108mm or 150mm. 200mm for STA20-200 and STA22 reinforced model. The drive unit can be fitted to the lintel, freestanding or integrated in the ceiling.



2 door telescopic

	Linear standard-sliding door		Linear telescopic sliding door	
				
Door type	E-STA (one leaf)	D-STA(two leaves)	E-TSA (two leaves)	D-TSA (four leaves)
Opening width	800 – 3000mm	800 – 3000mm	800 – 3000mm	1440 – 4000mm
Clear height of passage	3000mm	3000mm	3000mm	3000mm
Max. door leaf weight	1 x 150 kg	2 x 120kg	2 x 90 kg	4 x 80kg
DUO / RED model	1 x 150 kg	2 x 150 kg	2 x 120 kg	4 x 90 kg
Reinforced (20-200/22)	1 x 200 / 1 x 250 kg	2 x 150 / 2 x 200 kg	2 x 130 / 2 x 170 kg	4 x 90 / 4 x 130 kg
Recommended application	single leaf door automation for tight spaces	for most normal applications	for maximum width of passage in tight spaces	for elegant entrances and generous width of passage



Automatic Doors

Automatic sliding doors system

Fortress Land Door Hardware

Record system 20 Standard Applications

The record system 20 provides the right product for every application. Whether you require one of our highly versatile sliding doors, standard or telescopic, curved or angled, or one of our space-saving folding doors that fits into the tightest of spaces, record system 20 can deliver all of this and more.

Linear Sliding Door

Single or two leaf standard sliding doors can typically be seen wherever automatic sliding doors are required. Standard sliding doors have an opening width of 800 to 3000mm, and the strongest model takes door leaf weights of up to 2 x 200kg. Equally attractive and reliable, but more impressive in construction and range of motion, are our two or four leaf telescopic sliding doors. Thanks to their narrower door leaves, they require about 30% less space compared to standard sliding doors, and can cover particularly large opening widths of up to 4000mm.

Radial Sliding Door

Round and curved sliding doors are ideally suited to lending any facade a real touch of style. They provide the unsurpassed elegance of a revolving door, but are less complex and far more flexible with regard to looks. This type of door can be integrated into virtually any curved space and be curved inwards or outwards.

Angled Sliding Door

This is a highly original design, eye-catching and unusual. Angles are available between 90° to 180°.

Folding Door

Folding doors are necessary when the full width of entrances has, if possible, to be used. They are simple to retrofit, and integrate well into existing entrances. For example, a typical application is in restaurants to provide access to preparation area, or from the kitchen to dining room. The automatic folding door is also very useful for hallways in hospitals.

	Radial sliding door	Angled sliding door	Folding door
			
Door type	One or two leaves	Two or four leaves	Two or four leaves
Opening wide	800 – 3000 mm	800 – 3000 mm	800 – 2000 mm
Clear height of passage*	3000 mm	3000 mm	2500 mm
Door leaf weight max.	1 x 200 or 2 x 100 kg	2 x 120 or 4 x 80 kg	2 x 40 or 4 x 40 kg
as DUO / RED model	1 x 250 or 2 x 200 kg	2 x 200 or 4 x 90 kg	-
Recommended application	for elegant entrance solutions	for impressive entrances	for tight spaces and simple retrofitting

*recommended maximum value



Radial sliding door



Angled sliding door



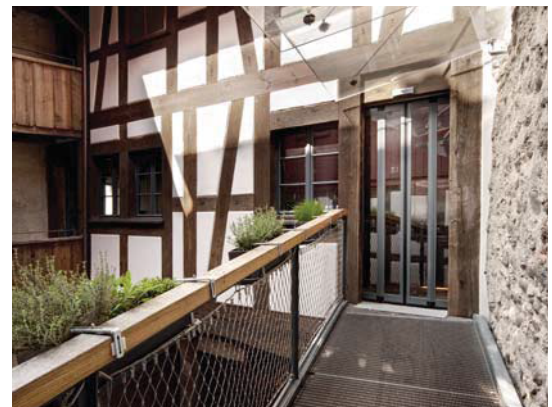
Radial sliding door



Angled sliding door



Folding doors



Record system 20 - Your Benefits

The record system 20 is the very latest generation of automatic door systems. In addition to making the development of tried and tested designs a permanent feature of their work, our developers have brought to market many innovative ideas which they have integrated into the record system 20.

In-house Development

The fruits of this innovative thinking are features such as opening widths that adapt to traffic frequency, and the ability of the sensor to suppress the interference of extraneous signals in the door area.

Thanks to the fact that record develops and produces both controls and sensors in-house and the ability to optimize the design and functionality of these devices to suite our products right from the design and planning phase.

Our sensors, which feature combined radar/infrared, radar only or active-infrared trigger devices are available for assembly on the lintel or flush with it.

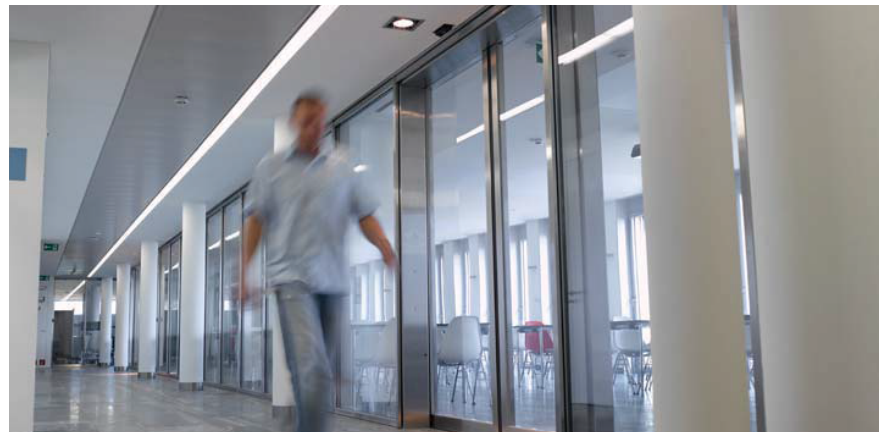
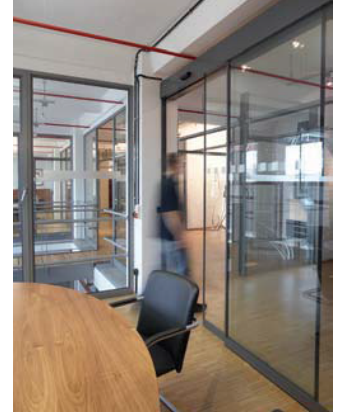
Faster Assembly

Considerations about reducing the complexity of installation, as well as the possibility of reducing assembly time through more drive pre-assembly, have led to the development of the slide bar. This enables us to manufacturer drives of identical widths, independent of the opening width, thur streamlining the manufacturer of the drive unit. As a result our automatic doors are by and large assembled and ready to run in a day.

Record have developed the slide bar drive design and are now in a position to provide it fro most linear sliding doors, even those with drive covers of just 108mm.

Mechanically the Best

Our efforts to produce the quietest automatic doors possible can also be seen in their operation. They open and close exceptionally quietly, which is indicative of the highest precision and the perfect matching of materials; this precision engineering can also be seen in the harmonious sequence of door leaf movements.



Record STA-20 - Options and Equipment



record system 20

- Standard sliding door, single or twin leaves
- Telescopic sliding door, two or four leaves
- Round or curved sliding door
- Angled sliding door
- Folding door
- Specific Sliding door solutions



Escape door systems



- Redundant (RED)
- Electrical power storage device BAT (UK/DK)
- Mechanical power storage device CO48 (F)
- Total opening system (TOS)

Installation Variants

- On lintel, freestanding or recessed in ceiling



Drive Covers

- Drive unit height 108mm and 150mm
- 200mm drive unit height for STA22
- Hinged, foldable drive unit cover and/or in several parts



Surface Finishes and Treatments

- In any RAL finish, powder-coated
- Clear or special anodized finish



Control Unit (STG)

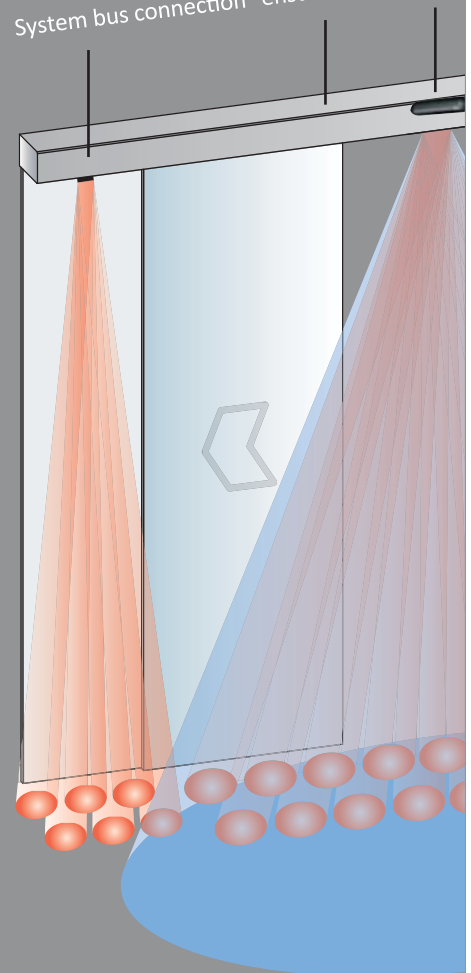
- Self-learning, 32-bit microprocessor control
- Controllable, adjustable door leaf motion sequence
- Low power consumption despite very high-performance drive unit



Burglar Protection Options

- SAFECORD burglar-resistant sliding door (tested and approved by WK2)
- Multipoint locking (MPV)
- Floor rails (stainless)
- Safety rails
- Floor locks (mechanical)

System bus connection ensures interactive



Special Options

- Optical locking display (OVA)
- Use-dependent opening width (TOWA)
- Bell contact
- Monitoring of locking
- Other options available in line with customer's wishes



Trigger Devices, Safety and Security Sensors

- RAD 290 (Radar motion sensor)
- AIR 290 (Active infrared motion sensor/ monitoring of persons)
- RIC 290 (combined sensor)
- Proximity switch (Infrared)



Buttons and Switches

- Wireless trigger device EASY open,
- Remote Control Device for RADAR
- Passive infrared sensors (PIR)



Key-operated contact (SSK)

- Built-on or remote controlled



Manual Unlocking

- HEI (indoors)
- HEA (outdoors)

Rechargeable batteries for emergency operation

- Available in a range of capacities



Locking

- Motorized bolt-operated locking (VRR 20)
- Magnetic locking (VRR 16)
- Multipoint locking (MPV)
- Magnetic catch



Protective screens

- Elegant protection against trapping



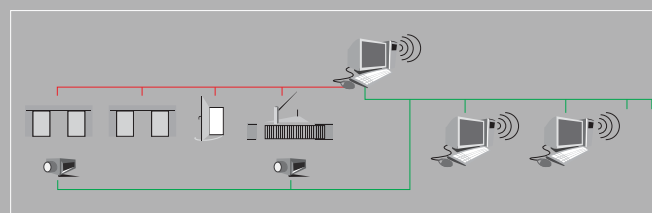
Remote Control Devices

- BDE-D (display with background lighting)
- Available in narrow fitting or square for standard built-in frames
- Equipped with key-operated lock if required



Central Door Management

- record ADM (from about middle of 2012)
- Web camera



Fire Protection System

- Several country-specific systems in accordance with E 30, EI 30



Record STA20 Specifications

	Standard sliding door		Telescopic sliding door	
	E-STA (single leaf)	D-STA (twin leaves)	E-TSA (twin leaves)	D-TSA (four leaves)
Drive dimensions				
d x h with side screen (mm)	194 x 108/150 or 197 x 200		259 x 108/150 or 262 x 200	
d x h without side screen (mm)	157 x 108/150 or 160 x 200		222 x 108/150 or 225 x 200	
Door movement	1.5s to 0.7m	1.0s to 0.7m	1.5s to 0.7m	1.0s to 0.7m
Electrical connection data	230V/50/60Hz/100W			
Ambient temperature	-15°C to +50°C			
Remote control unit	Graphic display with background lighting			
Modes of operation	<ul style="list-style-type: none"> → Automatic operation → Continuously open → Manual operation → One-way traffic → Locked 			
Optional functions	<ul style="list-style-type: none"> → Energy saving functions (automatic opening width TOWA) → Defining customer-specific door parameters → Control lock → Bell contact → Emergency opening or closing (programmable parameters) 			
Options	<ul style="list-style-type: none"> → Remote control unit BDE-D, compact model → Key operated contact (SSK) → record trigger devices: RAD 290, RIC 290, AIR 290 with record system bus connection → record ADM (central control and monitoring – from about middle of 2012) → optical lock indicator (OVA) → Manual unlocking on outside or inside of door → Locking device surveillance → Emergency stop switch → Rechargeable battery for emergency operation in power failures → Approved escape door systems → Hinged, foldable drive unit cover or in several parts → Module to extend functionality for optional upgrades (FEM) 			
Assembly variants	Lintel installation, free-standing or inside ceiling			

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Automatic Doors - RECORD STA 22

Automatic opening for heavy sliding door



*“Silent
Safe
Smooth”*

The Essences of
Automatic Doors



record



Product of Switzerland

Record STA 22 - Automatic opening of heavy linear sliding doors

Brief description

The robust STA22 automatic door is particularly suitable for special entrances and applications using heavy door leaves. Operator technology is particularly stable and reliable and has maintained its position successfully in the market for many years. The STA 22 automatic sliding door is the ideal solution for special heavy duty applications.

Mechanics

The absence of noise is the most striking feature of our automatic doors and is achieved with a combination of:

- » acoustically decoupled, hardened running tracks
- » running carriage with hardened nylon wheels with sealed bearings and compensation for structural tolerance and adjustable attachment to door leaves
- » motor and guide pulleys with sealed bearings
- » low momentum toothed belt drive for minimum wear and low acoustic impact

Electronics

- » interactive communication between components to monitor and enhance performance, safety and security
- » malfunction potential is greatly reduced by the drive monitoring ability
- » self learning process with active automation adjustment for optimum operation is the heart of the drive system which provides ongoing quality performance
- » BDE-M keyed 4 position mode switch with 'Reset' is supplied as standard

Option Include

- » Record BDE-D mode switch, with graphic display, enhanced by background lighting with menu-led navigation, full diagnostics and programming capability
- » AU Standard 4 position master keyable mode switch
- » AU Standard 4 position knob type mode switch

Design

- » carefully designed housing and covers in quality Australian Aluminium provide the aesthetically pleasing appearance of our systems which provide both standard and low profile options with the same 100% duty rated performance up to 250kg.
- » Standard profile: 200mm
- » Door frame profile up to 65mm can be used.

Key Features

- » Standard 200mm profile drive units
- » for doors with heavy leaves and heavy duty applications
- » robust construction with long life performance
- » high capacity with efficient and low noise operation
- » fail-safe electric mode brake locking with extended battery backup
- » self monitoring system with diagnostics
- » low noise, long life, replaceable track system
- » height adjustable trolleys with anti-rise and long wear wheels

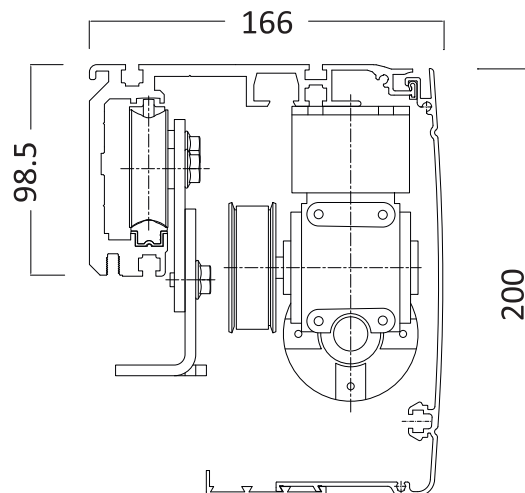
Technical Specifications

Door operating speed:	up to 0.7 m/s (adjustable)
Operating housing dimension:	HxD: 200x166
Power supply:	230VAC/50Hz
Power consumption:	120W, 25W idle mode
Stat. drive power:	Max. 150N
Protection rating:	For use in dry location only
Ambient temperature:	-15°C to +50°C

Recommended Application Limits

Door Type:	Single Door	Double Door Leaf
Door width:	800-3000mm	800-3000mm
Clear passage height:	3000mm	3000mm
Max. door leaf weight:	1 x 250 kg	2 x 200kg

Header Drive Unit Details



Record STA 22 is tested and fully compliant to European Standard DIN EN16005 (durability and safety). Through ILAC (international laboratory accreditation cooperation) arrangement, this testing meets all NATA guidelines and hence meets the requirements of Australian Standard AS5007-2007.



Automatic Doors

Automatic sliding doors system

Fortress Land Door Hardware

Inspection & Maintenance Services for Automatic Doors

Record has been manufacturing and marketing automatic door systems since 1953. The very first applications were to operate doors in laundries, but automatic door drives rapidly developed into attractive entrance systems with very different functional principles, initially driven by time saving needs. Later come the prestige element, and today our door systems enhance the architecture of any building, actively contributing to its security and safety, and saving energy by reducing heating and air conditioning costs.



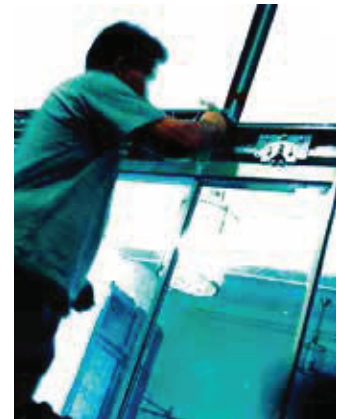
The right Service Package for your needs:

Today there are over 8000 record automatic door systems installed all over Switzerland, still operating smoothly, even after 20 years or more! Our customers use them every day and this enhances their satisfaction.

Reliability such as this only possible with a combination of clear aims and goals, the highest standards of design, construction and installation, and long-term maintenance by Record's highly skilled trained service technicians.



For your automatic door to function smoothly over decades and be able to fulfill the relevant safety and security regulations, periodic servicing and maintenance is unavoidable. Benefits from flexibility of a record maintenance contract, which will allow you to vastly reduce your operational and maintenance costs.



RECORD Partner

Inspection and maintenance have a particularly high priority for Automatic Doors. To avoid unpleasant situations for our customers, we make it our priority to personalise our service and maintenance packages, enabling you to fully meet your legal requirements of due diligence.

In consultation with you, our advisor will find the ideal maintenance and service package to meet all your needs.

Please contact Fortress Land for further details.



MAZDA



STA 21