

record STA 21

record system 20 technologies for light to medium-heavy applications



STA 21

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record STA 21 – remarkably inconspicuous

We designed the record STA 21 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 from record system 20 cutting edge technologies

The majority of the record STA 21 components are taken from the famous record system 20, 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. Our engineers 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 systems so popular among customers. By pre-defining door movements, unnecessary triggering of opening impulses can be eliminated. Undesirable opening movements (so-called "ghosting") 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.

Tasteful 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 systems to be integrated equally harmoniously in a building, or become a style feature.

Approved for the highest levels of safety and security

The record STA 21 product line fulfils all relevant European and national norms and standards, including DIN 18650, EN 16005 and EN ISO 13849.



D-TSA 2 leaves



D-TSA 2 leaves



E-TSA 2 leaves



E-TSA 2 leaves



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Designed for light to medium-heavy door applications

Based on the record system 20, the record STA 21 has been modified to meet the requirements of light to medium-heavy door applications. Both have the same system, enabling the interactive exchange of information between control, sensors and electronic remote control unit.

The most important functions

The 32-bit microprocessor control enables a wide variety of operational modes and functions. The mode of operation is selected intuitively using the BDE-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 STA 21 can be fitted with motorized bolt locking. Fitting security floor rails with extended blades can further enhance burglar protection levels.

One optional available is manual unlocking in or outside buildings to guarantee the opening of the automatic door during power failures. Another is a rechargeable battery equipped with charging status monitoring to open or close the door in emergencies. For the French market we even supply the CO48 emergency opening system, but with some restrictions on door leaf weights.

	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 – 2 000 mm	800 – 2 500 mm	800 – 2 500 mm	1 440 – 3 000 mm
Max. height of passage	2 500 mm	2 500 mm	2 500 mm	2 500 mm
Max. door leaf weight	1 x 120 kg *	2 x 75 kg *	2 x 80 kg *	4 x 50 kg *
Recommended application	For light duties in tight spaces	For functional entrances with large entrance widths	For maximum entrance widths in tight spaces	For elegant entrances with large entrance widths

* In line with examination certificate; up to 20% higher weights possible at reduced acceleration levels



D-STA 2 leaves



E-STA 1 leaf

Door applications	record STA 21	record STA 20	Special door automation
Standard sliding doors with 1 or 2 leaves	●	●	record STA 22 – STA
Telescopic sliding doors with 2 or 4 leaves	●	●	record STA 22 – TSA
Sliding doors with break-out system		●	
Round and angled sliding doors			RST/PST
Folding doors			FTA
Special models		possible	possible
Operator height	108 / 150 mm	108 / 150 mm	> 150 mm
Escape route systems RED ● / CO48 ● / TOS ●	●	● ● ●	● ● ●
Optional equipment			
Motorized bolt- ● or multi-point locking MPV ●	●	● ●	● ●
Profile system 20 mm (up to 10 mm single layer glass)	●	●	●
Profile system 32 mm (up to 24 mm insulating glass)	●	●	●
Foreign profiles up to 65 mm	●	●	●
Door protective screen (designed entirely in glass)	●	●	●
Rechargeable battery for emergency opening ● or emergency operation ●	●	● ●	● ●
Peripheral devices			
record BDE-D remote control device with text display	●	●	●
record sensor systems	●	●	●
record diagnostic maintenance tool	●	●	●



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record peripheral devices: sensors and remote control units

A decisive contribution to the success of our products is the fact that we are 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-house

When analyzing its immediate environment, the record RAD 290 motion detector permanently communicates with the control device. The detection field is defined electronically, allowing it to eliminate previously acquired door movements. Time-consuming mechanical fine adjustment of the sensor is thereby eliminated. Also, changes to the field due to temperature differentials are largely uncritical.

The record RIC 290 sensor device uses both radar and infrared technologies. It is equipped with both motion and presence detectors that trigger opening and closing operations with a high level of security. The device actively communicates with the door control, and recognizes persons in the passage area. Several light curtains also prevent collisions with the door leaves.

The record AIR 290 is a pure active infrared motion and presence detector, ideally suited to delineated detection fields such as are found in lobbies and security interlocks.

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 basic door functions. These can be individually adjusted to make sure running characteristics meet specific needs. The ease of use is ensured by the clear menu structure, available in the local language.

Sensors



radar-equipped motion detector RAD 290



motion and presence detector RIC 290



active infrared motion and presence detector AIR 290



flush-mounted model

Remote control units



BDE-D (60 x 60 mm) with surface-mounted housing



Customized BDE-D with key-operated contact

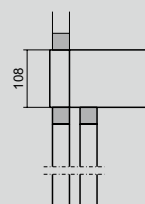
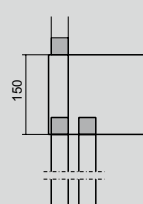
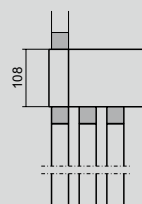
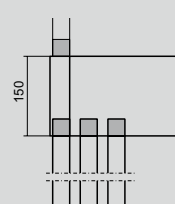


BDE-D slim-line (44 x 92 mm)



Mechanical with key-operated switch

Specifications

	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 / 150mm without cladding 157 x 108 / 150mm		with cladding 259 x 108 / 150mm without cladding 222 x 108 / 150mm	
Door movement	1.5 s to 0.7 m	1.0 s to 0.7 m	1.5 s to 0.7 m	1.0 s to 0.7 m
Mass				
Power supply	230V / 50 / 60Hz			
Power consumption	85W in operation / 25W in idle mode			
Ambient temperature	-15°C to +50°C			
Remote control	Electronic with illuminated display (record BDE-D)			
Operational modes	→ Automatic operation → Continuously open → Manual operation		→ One-way traffic → Locked	
Programmable functions	→ Customer-specific door parameters → Control lock → Bell contact		→ Emergency opening and closing (programmable parameters) → Energy-saving function (automatic entrance widening TOWA)	
Options	Sensor, safety and security → Bolt locking device VRR 20 → Motion detector RAD 290 → Motion and presence detector AIR 290 → Multi-purpose sensor RIC 290 → Floor safety rail → Floor lock → Key operated switch SSK → CO48 escape route door system (France) → Protective screen		Additional equipment → Optical locking display → Emergency-open button → Manual unlocking inside and outside of door → Battery for emergency operation during power failure → Locking device surveillance → Detachable operator housing	
Assembly variants	→ Lintel-mounted, free standing or on the ceiling			

Inspection and Maintenance Services

We have 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 came 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.

In the course of these developments, our products have become increasingly more refined, their functionality more comprehensive and their operation more convenient and user-friendly. At the same time, the legal requirements have become more demanding in order to enhance operational safety.

The right service package for your needs

Today there are over 8000 record automatic door systems installed all over Switzerland, our home market, still operating smoothly, even after 20 years or more! Our customers use them every day and this enhances their satisfaction. Reliability such as this is 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 in-house service technicians.

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

Your nearest record partner

Inspection and maintenance have a particularly high priority at record. The fact that record products are designed and built to last a long time also means they face changing legal requirements. 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.

To know more, please get in touch with your record partner!

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record STA 21

automatic opening of light to medium linear sliding doors



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automatic opening of light to medium linear sliding doors

Brief Description

Based on the record system 20, the record STA 21 has been modified to suit a lower budget whilst still meeting the requirements of light to medium doors in heavy duty applications.

Utilising the same Swiss engineered intelligence system enables the interactive exchange of information between the control system and the various activation and safety devices. The majority of the record STA 21 components are shared with the system 20, which has a proven track record in global markets, but fitted with smaller, lighter electrical motors and a specially modified PLC.

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 (replaceable)
- 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 processor with active automatic adjustment for optimum operation is the heart of the drive system which provides ongoing quality performance
- record BDE-D mode switch, with graphic display, enhanced by background lighting with menu-LED navigation, full diagnostics and programming capability

Options include

- record BDE-M keyed 4 position mode switch with operator reset
- 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. The elegant design lines allow our door systems to be integrated harmoniously into a building, or become a style feature.

record door leaf profiles are available in aluminium framed or frameless glass.

Key Features

- standard 160mm and low profile 110mm drive units
- high capacity with efficient and low noise operation
- failsafe electric motor brake locking with battery backup
- self monitoring system with diagnostics
- low noise, long life, replaceable track system
- height adjustable trolleys with anti-rise and long wear wheels
- matching profiles for standard and telescopic units

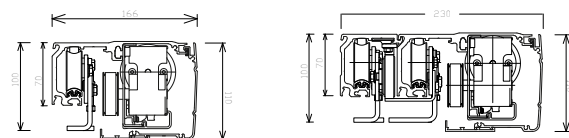
Technical Specifications

Door operating speed	up to 0.7 m/s (adjustable)
Operating housing dimensions H x D	Standard: 160 x 166 mm Low profile: 110 x 166 mm
Power supply	100 – 240VAC, 50 Hz
Power consumption	85W, 25W idle mode
Stat. drive power	Max. 150N
Protection rating	For use in dry locations only
Ambient temperature	-15°C to +50°C

Recommended Application Limits

	Standard Sliding (STA 21au)		Telescopic Sliding (TSA 21au)	
Door type	Single	Bi-Parting	Single	Bi-Parting
Opening width	800 – 3000mm	800 – 3000mm	800 – 3000mm	1200 – 4000mm
Passage height	3000mm	3000mm	3000mm	3000mm
Door leaf weight	1 x 120kg	2 x 100kg	2 x 80kg	4 x 50kg
Recommended for	standard sliding door applications		maximum opening width	

Pelmet Details (Low Profile Option)



Compliance

record STA 21 operators meet the Building Code of Australia (BCA) requirements and are tested to stringent European standards DIN EN16005 (durability and safety).

record complies with the design, safety and functionality guidelines of the non-legislative Australian Standard AS5007:2007.