record system 20

The trend-setting automatic door system
record system 20 – Features

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

Qualities

The record system 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 components, 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 machines, 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, elegant two and four leaf telescopic sliding doors, even graceful 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

For special applications there is an abundance of models available. The record system 20 range of products is also available for escape routes or specially equipped for specific applications.

Your Benefits

The record system 20 is the very latest generation in automatic door systems. 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 system 20 make it the market leader from the technological point of view.

Maintenance and Inspection

We have 26 subsidiaries in more than 50 countries and about 700 skilled service technicians whose training is a permanent part of our program.

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

Our hotline staff are ready to provide advice and practical support; they can dispatch the nearest record service technician immediately to your location. This guarantees rapid support for you also effectively reduces unnecessary waiting time.
**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.

**Mechanics**

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 finishing profiles all contribute 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. Thanks to its learning capacity, the potential of the unit to malfunction is reduced to a minimum.

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**

For the record system 20, there are 20 mm thick aluminium profiles available for 10 mm thick single glazed leaves, or 32 mm thick profiles suitable for 24 mm thick insulating glass to allow the greatest possible transparency. Even profiles of other manufacturers up to 65 mm can be fitted. Both profiles and drive unit cover can be anodized or powder-coated.

Drive unit heights for both the normal, DUO and RED versions are available in either 108 mm or 150 mm; 200 mm for the STA 20/200 and STA 22 reinforced models. The drive unit can be fitted to the lintel, freestanding or integrated in the ceiling.

<table>
<thead>
<tr>
<th>Linear standard-sliding door</th>
<th>Linear telescopic sliding door</th>
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</thead>
<tbody>
<tr>
<td><strong>Door type</strong></td>
<td>E-STA (one leaf)</td>
</tr>
<tr>
<td><strong>Door type</strong></td>
<td>D-STA (two leaves)</td>
</tr>
<tr>
<td><strong>Opening width</strong></td>
<td>800 – 3000 mm</td>
</tr>
<tr>
<td><strong>Clear height of passage</strong></td>
<td>3000 mm</td>
</tr>
<tr>
<td><strong>Max. door leaf weight</strong></td>
<td>1 x 150 kg</td>
</tr>
<tr>
<td><strong>DUO or RED model</strong></td>
<td>1 x 150 kg</td>
</tr>
<tr>
<td><strong>Reinforced (20/200 / 22)</strong></td>
<td>1 x 200 / 1 x 250 kg</td>
</tr>
<tr>
<td><strong>Recommended application</strong></td>
<td>Single leaf door automation for tight spaces</td>
</tr>
<tr>
<td></td>
<td>For most normal applications</td>
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<tr>
<td></td>
<td>For maximum width of passage in tight spaces</td>
</tr>
<tr>
<td></td>
<td>For elegant entrances and generous width of passage</td>
</tr>
</tbody>
</table>

*recommended maximum value*
**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 3000 mm, and the strongest model takes door leaf weights of up to 2 x 200 kg. 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 4000 mm.

**Radial Sliding Door**

Round and curved sliding doors are ideally suited to lending any façade 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° up to < 180° and can open inwards or outwards.

**Folding Door**

Folding doors are necessary when the full width of entrance 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 the preparation area, or from the kitchen to dining room.

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

*recommended maximum value*
### record system 20 – Nonstandard Applications

The record system 20 products are also available for use as escape doors or specially equipped for unusual applications.

#### Door systems for Escape Routes

The redundant model (RED) consists of two drive units, two independent controls and a rechargeable battery to ensure emergency operation in power failures. The drive with battery monitoring (BAT) is officially permitted in Britain and Denmark as an escape door system. Also available for the French market is the CO48 opening system with mechanical power storage.

Our standard sliding doors and folding doors can also be ordered equipped with the Total Opening System (TOS). The door leaves can be swung open in the direction of escape, enabling the largest possible width of passage. Doors with swing-out side screens can also be integrated into the TOS system (standard with escape door systems).

#### Special Applications

For the healthcare sector, record has created the SEAICORD and CLEANCORD models. The former sliding door provides a hermetically airtight seal of up to 100 Pa to divide clean rooms from other zones; this model is also available equipped with radiation or laser protection. To separate clean zones, we also provide the CLEANCORD, an automatic sliding door complete with plinth, finished in hygienic, easy-to-clean V2A stainless steel.

The FEUCORD is record’s robust fire protection door. An automatic EI 30 / E 30 sliding door, approved by Swiss VKF-AEAI norms and standards, this model is equipped with thermally insulated steel profiles, Palusol seals and Pyrobel fire resistant glazing. The FEUCORD model is also available for use in escape routes.

The burglar resistant SAFECORD sliding door has also been approved by the Swiss authorities (fasif) and is officially approved by them as Class 2 Resistant to provide effective but understated burglar resistance. Features are multipoint locking, reinforced running gear, continuous floor guides, special laminated safety glass, and steel plate reinforced framework.

#### Other Solutions

We can also provide you with suitable applications in addition to system 20. Whether you require a record drive unit for swing doors, one-way access systems or representative revolving doors, your record partner can provide you with all the necessary information, including competent advice and service. Please ask for our detailed brochure.

<table>
<thead>
<tr>
<th>Door type</th>
<th>RED</th>
<th>BAT (UK, DK) / CO48 (F)</th>
<th>TOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard sliding door</td>
<td>★</td>
<td>★</td>
<td>★</td>
</tr>
<tr>
<td>Telescopic sliding door</td>
<td>★</td>
<td>★</td>
<td>★</td>
</tr>
<tr>
<td>Round / curved sliding door</td>
<td>★</td>
<td>★</td>
<td>★</td>
</tr>
<tr>
<td>Angled sliding door</td>
<td>★</td>
<td>★</td>
<td>★</td>
</tr>
<tr>
<td>SAFECORD</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Folding door</td>
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</tbody>
</table>
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 is one of the few manufacturers of automatic doors that develops and produces both controls and sensors in-house, we are able to optimize the design and functionality of these devices to suit our products right from the design and planning phase. Thus record is optimally positioned to provide 100% compatible control software for its doors and peripherals.

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. The unique learning ability of the record system 20 ensures an unusually high level of reliability with regard to functionality. Self-triggering, also called ghosting, caused by the door leaves as they close, has been completely eliminated.

Faster Assembly

Considerations about reducing the complexity of installations, 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 manufacture drives of identical widths, independent of the opening width, thus streamlining the manufacture of the drive unit. As a result, our automatic doors are by and large assembled and ready to run in a day.

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

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.
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 CD48 (F)
- Total opening system (TOS)

**Installation Variants**
- On lintel, freestanding or recessed in ceiling

**Maximum Door Leaf Weight**
- Standard sliding doors (DUO / RED): E-STA 1 x 150 kg [1 x 150 kg], D-STA 2 x 120 kg [2 x 150 kg]
- Telescopic sliding doors (DUO / RED): E-TSA 2 x 90 kg [2 x 120 kg], D-TSA 4 x 80 kg [4 x 90 kg]
- Reinforced models STA 20-200 [STA 22]: E-STA 1 x 200 kg [1 x 250 kg], D-STA 2 x 150 kg [2 x 200 kg], E-TSA 2 x 130 kg [2 x 170 kg], D-TSA 4 x 90 kg [4 x 130 kg]

**Profile Systems for Door Leaves, overhead lights and side panels**
- Aluminium 20 mm for 10 mm single glazing
- Aluminium 32 mm for 24 mm insulating glass
- Other brands of profile up to 65 mm

**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

**Drive Covers**
- Drive unit height 108 mm and 150 mm
- 200 mm drive unit height for reinforced models STA 20-200 and STA 22
- Hinged, foldable drive unit cover or in several parts

**Burglar Protection Options**
- SAFECORD burglar-resistant sliding door [tested and approved by WK2]
- Multipoint locking (MPV)
- Floor rails (stainless)
- Safety rails
- Floor locks (mechanical)
Trigger Devices, Safety and Security Sensors
- RAD 290 (Radar motion sensor)
- AIR 290 (Active infra-red 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)
- 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

FEUCORD Fire Protection System
- Sliding door system E 30, EI 30 (VKF CH)
- Several country-specific systems

Central Door Management
- record ADMpro
- record ADMopen
- Web camera

We reserve the right to make technical modifications at any time.
record system 20 – 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.

You 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!
# Specifications

<table>
<thead>
<tr>
<th></th>
<th>Standard sliding door</th>
<th>Telescopic sliding door</th>
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<tbody>
<tr>
<td></td>
<td>E-STA (single leaf)</td>
<td>D-STA (twin leaves)</td>
</tr>
<tr>
<td>Drive dimensions</td>
<td></td>
<td></td>
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<tr>
<td>T x H with side screen (mm)</td>
<td>194 x 108 / 150 or 197 x 200</td>
<td>259 x 108 / 150 or 262 x 200</td>
</tr>
<tr>
<td>T x H without side screen (mm)</td>
<td>157 x 108 / 150 or 160 x 200</td>
<td>222 x 108 / 150 or 225 x 200</td>
</tr>
<tr>
<td>Door movement</td>
<td>1.5 s to 0.7 m</td>
<td>1.5 s to 0.7 m</td>
</tr>
<tr>
<td>Door movement</td>
<td>1.0 s to 0.7 m</td>
<td>1.0 s to 0.7 m</td>
</tr>
<tr>
<td>Electrical connection data</td>
<td>230 V / 50 / 60 Hz / 100 W (type of protection IP54)</td>
<td></td>
</tr>
<tr>
<td>Ambient temperature</td>
<td>−15 °C to +50 °C</td>
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<tr>
<td>Remote control unit</td>
<td>Graphic display with background lighting</td>
<td></td>
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<tr>
<td>Modes of operation</td>
<td>Automatic operation</td>
<td></td>
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<td></td>
<td>Continuously open</td>
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<td>Manual operation</td>
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<td>One-way traffic</td>
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<td></td>
<td>Locked</td>
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<tr>
<td>Optional functions</td>
<td>Energy saving functions (automatic opening width TOWA)</td>
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<tr>
<td></td>
<td>Defining customer-specific door parameters</td>
<td></td>
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<tr>
<td></td>
<td>Control lock</td>
<td></td>
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<tr>
<td></td>
<td>Bell contact</td>
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<td></td>
<td>Emergency opening or closing (programmable parameters)</td>
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<tr>
<td>Options</td>
<td>Remote control unit BDE-D, compact model</td>
<td></td>
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<td></td>
<td>Key operated contact (SSK)</td>
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<tr>
<td></td>
<td>record trigger devices: RAD 290, RIC 290, AIR 290 with record system bus connection</td>
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<tr>
<td></td>
<td>record ADM (central control and monitoring – from about middle of 2011)</td>
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<tr>
<td></td>
<td>optical lock indicator (OVA)</td>
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<tr>
<td></td>
<td>Manual unlocking on outside or inside of door</td>
<td></td>
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<tr>
<td></td>
<td>Locking device surveillance</td>
<td></td>
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<tr>
<td></td>
<td>Emergency stop switch</td>
<td></td>
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<tr>
<td></td>
<td>Rechargeable battery for emergency operation in power failures</td>
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<tr>
<td></td>
<td>Approved escape door systems</td>
<td></td>
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<tr>
<td></td>
<td>Hinged, foldable drive unit cover or in several parts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Module to extend functionality for optional upgrades (FEM)</td>
<td></td>
</tr>
<tr>
<td>Assembly variants</td>
<td>Free-standing on lintel, or inside ceiling</td>
<td></td>
</tr>
</tbody>
</table>

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