

DFA 127

automatic drive system for swing doors



DFA 127



DFA 127

DFA 127 – the universal drive system for swing doors

The record DFA 127 is a universal drive system for the automation of swing doors. It is characterized by sophisticated technology, compact design and especially record's legendary smoothness of operation. The focus on a broad range of applications makes it a full-fledged drive, suitable for widely differing requirements.

Universally applicable

Its universal qualities are mainly due to its electro-mechanical construction, and partly due to its modular design. When the door drive motor operates, it simultaneously tensions a spring integrated in the drive housing. The shutting movement uses energy stored in the spring, which, depending on requirements, is also motor-assisted. Even without motor assistance, thanks to ingenious mechanics, optimum power deployment is achieved in the entire door swing area. This is necessary to move the door reliably to its end position against draft resistance, for example, and also complies with the norms and standards of current safety requirements.

The record DFA 127 is available to operate doors in sizes EN4 to EN6. The different spring forces required can be quickly and precisely adjusted on the spot using the special adjustment screw.

In detail, this model also provides many other sophisticated features, allowing pre-defined door types to be quickly and easily adapted to local and country-specific circumstances.

Features:

- DIN 18 650-compliant technology, approved worldwide
- Approved as a hold-open system for fire protection barriers
- Can be used with various fire-protection profile systems such as Jansen, Forster, Heroal and Schüco
- Features gerontology technology for barrier-free access

Variations:

- Double swing doors with or without master / slave operation
- Power saving mode: adjustable opening of one or both door panels (stretcher opening)
- Integrated sequential closing control for double-leaf fire door applications
- Interlock function for two single doors installed consecutively
- Direction-oriented opening for oncoming traffic in corridors
- Opening or closing without current





DFA 127

DFA 127 – one drive system with four orientations

→ One version → modular construction → all types of installation → well-proven technology

FULL POWER



The **STRONG** one
very versatile

Key benefits:

- Universal, powerful, programmable
- Extensive functionality without additional modules
- Robust, reliable mechanics

Recommended use:

- Optimized for the use of large, heavy doors
- Provides a high level of dynamism



Compact and powerful

LOW ENERGY



The **GENTLE** one
with reduced motion energy

Key benefits:

- Depending on location, little or no additional sensors required
- Lowers the inhibition threshold, even in elderly people
- Its gentle operation is convenient and inspires confidence

Recommended use:

- Suitable for environments with people of limited or slow reactions



Can be used without security or safety sensors

INVERSE



The **SAFE** one
opens without mains power

Key benefits:

- No emergency power supply required
- Opens by spring force
- Door hinge is integrated into drive (no tripping hazard on the ground)

Recommended use:

- Opens to vent smoke from inside buildings in case of fire
- Guides people in power failures



Opens in power failures, enhances safety and guidance in emergencies

FIRE



The **RELIABLE** one
closes reliably in case of fire

Key benefits:

- Combines comfort with safety
- Can be used with various fire-protection profile systems

Recommended use:

- Acts as a fire and smoke barrier



Secure closure in case of fire

The following is valid for all drive types:

- Identical design of available models
- Technically unified, coherent approach
- Proven peripherals, developed and produced in-house
- Cross-platform operating system
- Remarkably smooth in operation
- Easy to maintain and reliable
- Drive housing available in stainless steel or aluminium
- Surface treatments available in a variety of designs and finishes



Crew



DFA 127

DFA 127 – the right choice every time

The FULL POWER and LOW ENERGY versions demonstrate that the DFA 127 is the correct choice despite conflicting requirements. The strength of the FULL POWER version can move doors of several hundred kilos in weight, whereas the LOW ENERGY version, however, is limited to 1.6 joules of kinetic energy to enable it to operate safely without special sensors.

DFA 127 FULL POWER

The DFA 127 FULL POWER is the powerhouse in the family of record swing door operators. Its adjustable spring force gives it great versatility, and can be adjusted on the spot, enabling a range of door sizes from EN4 to EN6 to be used. This enhances its flexibility, enabling it to take additional customer-specific settings. Its sophisticated technology is under the auspices of the record control, enabling complex functions with optimum power deployment in the entire swing area.

Especially suitable for use in:

- Retail outlets
- Airports
- Administration and office buildings
- Restaurants and hotels

DFA 127 LOW ENERGY

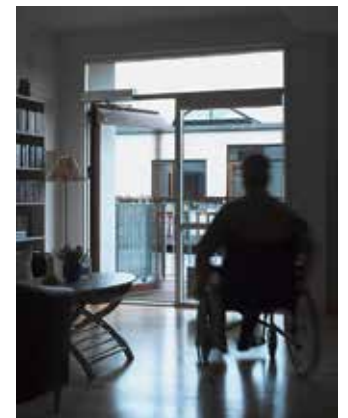
The DFA 127 LOW ENERGY is the ideal drive for environments where people move only slowly and have limited reaction capacity, such as hospitals and nursing homes. Kinetic energy is limited to 1.6 joules, which means the safety of people in the swing area, even in the absence of additional security sensors, is not compromised.

Especially suitable for use in:

- Homes for the elderly and disabled
- Hospitals, clinics and retirement homes
- Private homes and apartments

Special benefits:

- Thanks to its smooth, even movement, it lowers the inhibition threshold of slow-reacting people
- Additional security sensors can be dispensed with
- Practically silent operation preserves the peace and quiet of living areas





DFA 127

DFA 127 – escape route and fire protection applications

For escape route and fire protection applications, record has the INVERSE and FIRE versions. These are further variations of the record DFA 127 electro-mechanical swing door operator, although look identical to them.

DFA 127 INVERSE

The DFA 127 INVERSE enables doors to open securely and reliably, even without a power supply. During the motor-driven closing cycle, the energy required for opening is mechanically stored using a spring. Should smoke start to fill the building, the independent smoke and heat venting system controls the drive, and the INVERSE opens reliably, even during power failures. The door can therefore be used to allow fresh air to circulate inside buildings, or to vent smoke and heat.

Especially suitable for use in:

- Escape route openings
- Securing guide routes for persons
- Venting smoke and heat

Special benefits:

- The opening stop is integrated into the door drive system (no hazard for pedestrians to stumble over)
- No emergency power supply required to open the door
- The electromagnetic parking brake means additional electrical opening devices on interior doors can be dispensed with.



DFA 127 FIRE

The DFA 127 FIRE is approved for use as a smoke and fire protection door. In case of fire, a signal from the smoke and heat detector or fire alarm system triggers immediate closing of the passage. Closing takes place by spring force. The SFR 127's mechanical sequential control also enables double leaf fire doors to be used.

Especially suitable for use as:

- Fire and smoke protection barriers

Special benefits:

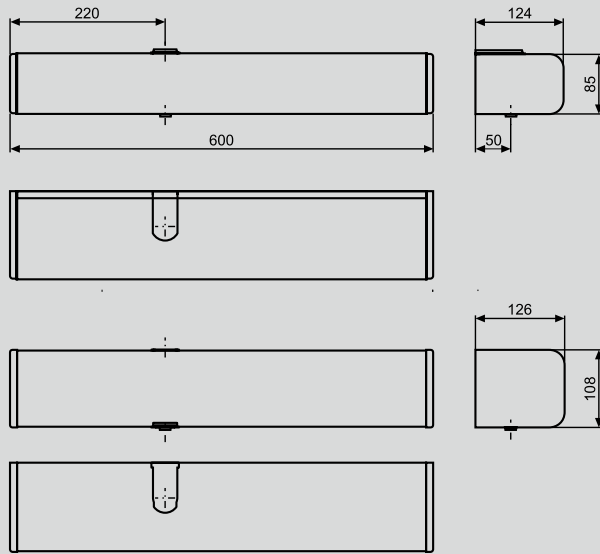
- Compact design thanks to built-in fire protection components
- Door system can be connected to on-site fire control
- Own additional control to connect smoke and heat detector ports
- Can be used with various fire protection profile systems





DFA 127

DFA 127 – technical specifications



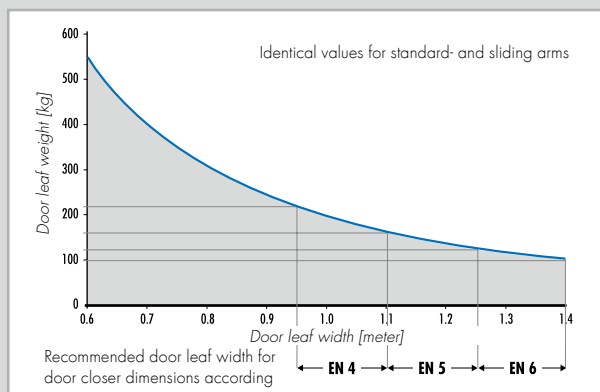
Dimensions of the operator (H x W x L)	85 x 124 x 600 mm or 110 x 126 x 600 mm
Door closer size	EN4 – EN6 for standard arm and slide arm
Opening time / closing time	3 – 20s / 5 – 20s
Opening angle	70 – 115° (INVERSE up to 95°)
Electrical power supply	230VAC, 50 / 60 Hz
Rated power	67W
Consumption in standby mode	13W

Operating modes with internal BDI operating switch	Automatic operation
	Continuously open
	Manual operation

Operating modes with BDE-D control panel with display (optional)	In addition to the standard modes
	Locked
	One-way traffic
	Operation lock

Functions	Automatic reverse
	Touch control (push and go)
	Emergency stop, interlock control or 2-leaf doors
	Customer-specific door parameters
	Hold-open system for fire and smoke protection doors

Options	Electro-magnetic brake
	Integrated mechanical sequential control SFR 127
	Special control option: «barrier-free WC access»
	Hold-open system for fire and smoke protection doors



Installation variants



Lintel installation
(1-leaf door)
Standard bars, DIN left or right, pushing;
drive variant for pushing sliding bars
available



Lintel installation
(1-leaf door)
Slide arm DIN left or right pulling



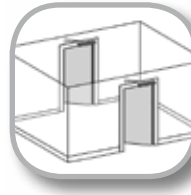
Lintel installation
(2-leaf door, master / slave operation)
Two electrically coupled drives with
standard arm pushing or slide arm
pulling



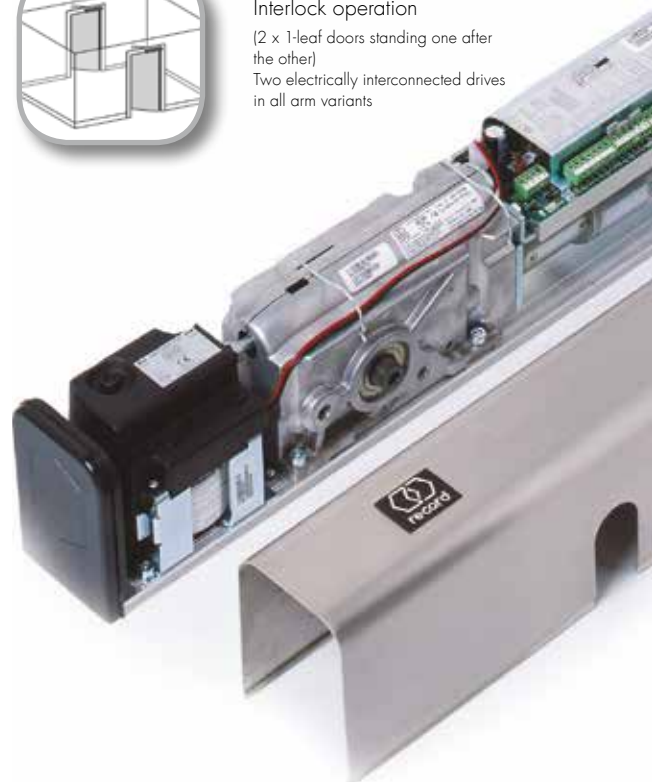
Lintel installation
(2-leaf door with two-way traffic)
Alternating operation of two drives that
are independent of each other



Door leaf installation
(1-leaf door)
Arm and possible combinations such as
lintel installations



Interlock operation
(2 x 1-leaf doors standing one after
the other)
Two electrically interconnected drives
in all arm variants



Accessories and options

Arm types

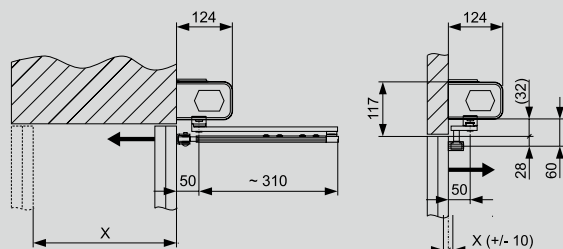
- The power transmission from the drive to the door works by means of a bar, which, depending on the mounting situation is available as a standard or sliding arm. Standard arms are available in different lengths to compensate for a range of lintel sizes.
- Through the use of optional axle extension pieces, so-called spacer bushes, different lintel heights can be compensated for.



Standard arms, pushing

Sliding arms, pulling or pushing

Lintel depths



Type	Standard arm SG1 – SG3	Slide arm GG
Lintel depths	$X = 0 - 330\text{mm}$	$X = 0 + / - 10\text{mm}$

Axis extensions

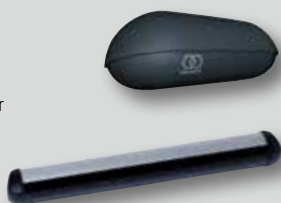
- For standard or slide arm



Type	Standard arm pushing	Slide arm pulling
20 – 80	42.5 – 102.5mm	32.0 – 92.0mm

Sensor systems

- record RAD 290 radar motion detector
- Infrared presence detector
- Security sensors for the monitoring of the door swivel area



Product range



FULL POWER



LOW ENERGY



INVERSE



FIRE

(conforms to DIN 18650)

FULL POWER + LOW ENERGY + FIRE

- Currentless drive units function like a mechanical door closer

INVERSE

- Currentless drive unit opens using spring tension

Arm systems and accessories

- Standard arm: pushing, different lengths
- Slide arm pulling and pushing with integrated stop
- Axis extensions

Operator casing

- Standard (stainless steel 85 mm) and in aluminium 85 mm or 108 mm
- Extended as required
- Extended for double swing doors (master / slave operators)

Treated surfaces

- Satin stainless steel or coloured aluminium or anodised



Spring tension

- Adjustable spring pretensioning (EN4 – EN6)

Installation versions

- Lintel installation on hinge side or opposite hinge side
- Door panel assembly
- Hold-open systems for fire protection barriers
- Master / slave operation applied as fire proof doors require also a mechanical sequential control SFR 127



Trigger devices



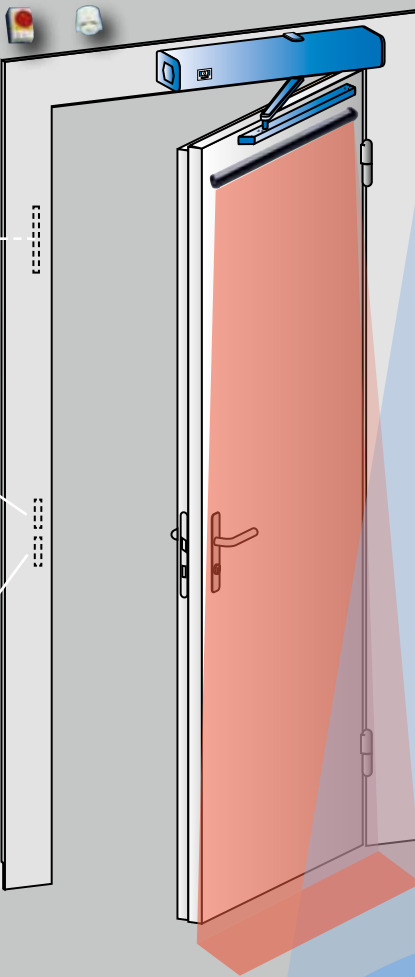
- Radar motion detector RAD 290
- Active and passive infrared sensors
- Hygienic sensor
- Push button

- Presence detector
- Pull switch
- Remote controller
- Key operated contact



Smoke and fire detector

Main switch



Safety + security sensors (both sides)

- Sensor bar to monitor door swing area: flexible cable routing for existing doors



Electrical lock and emergency switch

- To secure escape routes



Electrical lock

- To open fire and smoke proof doors (approval necessary)

Locking contacts

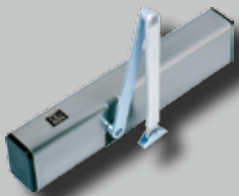
Additional options

- Interlock control (master / master)
- Mechanical integrated sequential control, for use with fire protection doors (only possible with housings 108 mm high)



Control panel

- BDI (toggle switch standard)
- Options:
 - BDE-D with display
 - Manual switch
 - BDE-M (mechanical key switch instead of BDI)



DFA 127



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record DFA 127 – 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 8 000 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!



Contact

