# record

# record C 127

Concealed underfloor drive for swing doors



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A well-maintained principle in developing our products is how noticeably quiet they are during operation. The prime example of this is the record DFA 127 designed for the automation of swing doors, that only produces a slight noise even when being utilised to the full. With the installation set for underfloor assembly that is now on offer, even the latter is reduced to the point where the door can practically no longer be heard moving.

# Invisible record drive – tried and tested, powerful and silent

The record C 127 underfloor drive for swing doors adds another type of application to the range of the record DFA 127 product range that has been truly tried and tested for many years. Experience, expertise and reliable technology from record have been combined in the development of this drive. Due to its modular construction and its flexibility in adapting it to the existing door, the record C 127 can be used for the most diverse applications. As it is extremely quiet and has a high level of momentum, even heavy doors weighing up to 400 kg can easily be moved with it.

The concealed drive supports the design leeway available to the sophisticated architect. The easy-care system is sunk into the ground – if necessary concealed underneath the floor covering – and thus harmoniously blends in with the entrance area.

### **Benefits**

- → Invisible drive
- → Absolutely silent
- → Powerful up to 400 kg door leaf weight
- It is also possible to used drives for double-leaf door systems (master/slave)
- → Tested in accordance with Protection Class IP67
- > Intuitive record operating concept
- The serial drive has proved its worth hundreds of thousands of times
- → Low-maintenance

# Fully integrated; encapsulated to repel dirt and liquids

The drive unit of the door is placed in its own housing, where it is protected from mechanical influences. Three water-resistant cable glands are used to connect the power supply, actuating elements and safety sensors.

The strong encapsulation to avert dirt and moisture in accordance with Protection Class IP 67 offers high protection against various ambient influences. Puddles of melted snow and ice or rainwater, as well as washing liquid from floor cleaning machines, do not impair the record C 127 underfloor drive's operation.

### Wind load brake

Our record C 127 is not only protected against water. The wind also has a great influence on the doors, particularly in coastal and mountainous regions, where it builds up enormous forces. Without braking, there is a risk of damage to the door leaf and drive motor upon impact with the end stops. These dangers can be avoided by using a wind load brake, which acts on the drive motor.

Too high speeds of the door leaf, caused by the influence of persons, wind gusts or heavy winds, are avoided by the wind load brake. This prevents uncontrolled impact on the end stops. The brake becomes active during the last 20° of the opening angle both before the open position and before the closed position. The wind load brake can be extended to an effective range of 30° for doors that are particularly exposed to the wind.

### **INVERSE** safety option

In the normal version, the record C 127 opens doors using a motor and closes them with spring force. The INVERSE version reverses this principle, but remains almost unnoticed in daily operation.

If a building is filling with smoke and the drive is activated by an external smoke and heat extraction system, the C 127 INVERSE opens reliably – thanks to opening by spring force, even in the event of a power failure. This enables the door to be used as an air vent opening for a targeted fresh air supply or for smoke and heat extraction.

### Use

The record C 127 underfloor drive is suitable for single or double-leaf framed glass doors or all-glass doors. The operating modes can be selected conveniently using the record BDE-D electronic control unit. The backlit display of this unit provides information at all times about the current operating condition of the door in the local language and in plain text.

We moreover offer a range of sensors, contactless and touch-sensitive buttons and matching accessories, co-ordinated with our products, which excels through outstanding actuating performance, the highest degree of reliability and optimum safety.







### record C 127 - CENTER & OFFSET

The record C 127 is available in two basic versions. The CENTER version with a central drive flange and the OFFSET version with a laterally offset drive flange.

### **CENTER**

In the CENTER design, the door leaf is driven by means of a lever arm installed in the centre, either directly, in which case the lever arm may simultaneously function as a lower door mounting, or with the aid of a sliding arm, as is required in the case of doors attached to the frame. The lateral clearance of the lever arm is 120 mm; the clearance of the lever arm to the front is 61 mm in the standard version and 76 mm in the heavy version. In order to make use of the slightest projection, these two versions can also be installed at a 90° angle to the door sill.

### **OFFSET**

In the OFFSET version, the drive pin has been offset from the centre to the edge of the housing, thereby reducing the clearance to the side wall to only 60 mm. This ensures that expansion joints or moisture barriers installed in front of the door sill are not affected and the drive can be mounted completely on the inside of the building.

For double-leaf door systems, another, symmetrically identical, housing shape has been developed. The doors can also be opened either inwards or outwards.

### Angle of aperture

The opening angle of the heavy versions is 95° maximum and can be limited electronically to approximately 70°.

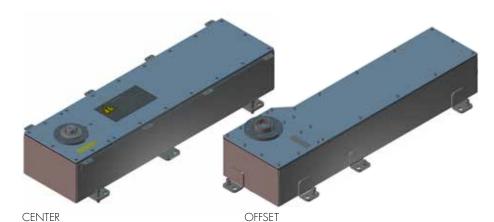
The record C 127 CENTER Standard offers a larger opening angle of up to 115°. However, because of the modified transfer, this drive is only suitable for narrow door wings.

### **Options**

- → Stainless steel floor plates to cover the drive
- → Fixed wall box for the CENTER version
- → Different lever arm lengths sliding rods for the CENTER version
- → Wind load brake (standard with OFFSET)
- → Various actuating elements and fuse sensors











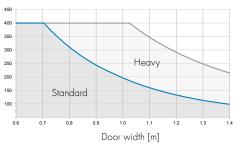


# Installation situation & possibilities

### Door wing weights & door widths

The following performance diagram illustrates the record C 127:

### Door leaf weight [kg]



### Operating modes

The following operating modes can be set:

### Manual mode

In manual mode, the drive is used as a mechanical door closer. The door can be opened without motor resistance and closes purely mechanically with

### Power Assist (optional programming)

Power Assist is a function that allows a door to be opened manually, but opening movement is motor-assisted. The main advantage is that even heavy doors can be opened effortlessly with minimal effort, since the motorised assistance balances the initially high moment of inertia. This is necessary for children or elderly people in particular, who could otherwise have difficulty in applying sufficient force to open a heavier door.

### Touch control

With the touch control system, the door requires only a short, fixed pulse to be opened automatically. The door closes after a selectable time span of 0-60seconds has expired.

### Automatic mode

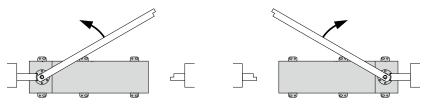
In automatic mode, an electronic opening pulse is sent to the door via a sensor, a key switch or a button.

### One-way traffic

One-way traffic ensures that store owners can finish work on time: The opening pulse from the external sensor, switch or button is suppressed, so that the door only reacts to people wanting to leave the store.

In the locked state, the powerful motor uses full power to resist manual opening of the door leaf. For effective burglar protection, the door must also be secured with locks.

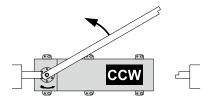
### CENTER Standard installation situation



Direction of rotation reversible

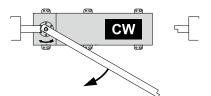
230 VAC version: 0809026, 115 VAC version: 0810172

### CENTER Heavy installation situation



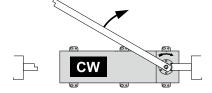
Opens counterclockwise

230 VAC version: 0811385; 115 VAC version: 0811386



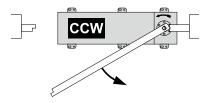
Opens clockwise

230 VAC version: 0809027; 115 VAC version: 0810171



Opens clockwise

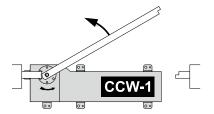
230 VAC version: 0809027; 115 VAC version: 0810171



Opens counterclockwise

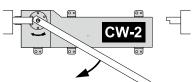
230 VAC version: 0811385; 115 VAC version: 0811386

### OFFSET Heavy installation situation



Opens counterclockwise

230 VAC version: 0812680; 115 VAC version: 0812679

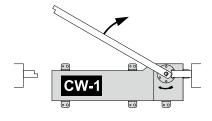


Opens clockwise

230 VAC version: 0812683; 115 VAC version: 0812682

230 VAC version: 0812687: 115 VAC

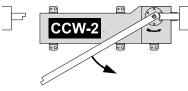
version: 0812686



Opens clockwise

230 VAC version: 0812685; 115 VAC

version: 0812684



Opens counterclockwise

### Options



Lever arm shaft OFFSET (is made individually project-specifically)



CENTER standard lever with standard damping disc



CENTER sliding arm with lever arm and standard 10 mm spigot shaft



CENTER polished stainless steel floor plate 820 x 310 mm



CENTER cranked standard lever for hinged doors



CENTER spigot shaft for sliding arms 10, 18 or 25 mm



CENTER fixed wall box 780 x 270 x 145 mm



CENTER splined hub, 25 mm to support the lever arm and door leaf



CENTER spline shaft extension 50, 75, 100 mm/distance tube 75 mm

				CENTER Drive						OFFSET Drive							
Options		230VAC			115VAC			230VAC				115VAC					
		0809026	0809027	0811385	0810172	0810171	0811386	0812680	0812683	0812685	0812687	0812679	0812682	0812684	0812686		
Direction of rotation reversible		•			•												
Wind load damping, Standard	0813027																
Wind load damping, Heavy	0812368																
OFFSET lever arm shaft 105 – 150 mm	individual									•	•						
Splined hub 25 mm	0111136																
Spline shaft extension 25 mm	0115502	•	•	•													
Spline shaft extension 50mm	0115503																
Spline shaft extension 75 mm	0115614																
Spline shaft extension 100 mm	0115416																
Distance tube 75 mm	0116168																
Standard lever 12 mm	0808993	0*	0*	0*	0*	0*	0*										
Standard lever 15 mm	0813031																
Sliding arm with 10mm spigot shaft	0809028																
Spigot shaft for sliding arm 18 mm	0109505																
Spigot shaft for sliding arm 25 mm	0108630																
Cranked standard lever	0811470																
Fixed wall box	0809020																
Standard stainless steel floor plate	0809044																
Heavy stainless steel floor plate	0809019																

Key:  ${\color{red}\bullet}$  Standard;  ${\color{gray}\circ}$  Option;  ${\color{gray}-}$  not available;  ${^*}$  no surcharge

### Contact

### Technical specifications:

Housing dimensions CENTER 710×200×130 mm, with installation housing 780×270×145 mm

(LxBxD):

Housing dimensions OFFSET 850x260x158.2mm

(LxBxD):

230 VAC 50/60 Hz, 115 VAC 50/60 Hz Operating voltage: 13W in standby mode, 67W rated power Power consumption:

Maximum torque: 50 Nm (80 Nm in the case of a reinforced "Heavy" version)

65 kgm2 (140 kgm2 in the case of the reinforced "Heavy" version) Maximum moment of inertia

of the door leaf:

Door weight: Up to  $400 \, \mathrm{kg}$ 

Adjustable parameters:

Can be selected from 70° to 95°, CENTER Standard to 115° Angle of aperture:

Can be selected from 0 to 60 seconds Hold-open time: Can be selected from 3 to 20 seconds Opening speed: Can be selected from 5 to 20 seconds Closing speed:

Operating conditions:

-15 °C to +50 °C Ambient temperature\_

Humidity range: Up to 85% relative humidity, non-condensing Wind load: Designed for wind load zone  $2(25\,\mathrm{m/s})$ 

Protection class: IP 67

### → record UK limited

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