

# Wel, Sprint

ENG

Automations for swing doors



Advanced entrance technology

## Automations for swing doors






Swing doors to be automated may all seem alike, and yet they have different operating requirements. DITEC offers 4 different automation models.



Product Range				
Description	WEL E	WEL M	WEL S	SPRINT
Automation for swing doors	motor opening, spring closing	motor opening and closing	motor opening, spring closing	motor opening and closing
Special uses	disabled use	disabled use emergency exits	disabled use emergency exits	disabled use
Duty class	very heavy	very heavy	very heavy	very heavy

Technical Specifications				
Description	WEL E	WEL M	WEL S	SPRINT
Capacity	100 kg x 1 m 80 kg x 1.2 m	250 kg x 1 m 150 kg x 1.5 m	250 kg x 1 m 150 kg x 1.5 m	100 kg x 1 m 80 kg x 1.2 m
Intermittent operation	S2 = 30 min - S3 = 80%	S2 = 30 min - S3 = 80%	S2 = 30 min - S3 = 80%	S2 = 30 min - S3 = 80%
Power supply	230 V~ / 50-60 Hz	230 V~ / 50-60 Hz	230 V~ / 50-60 Hz	230 V~ / 50-60 Hz
Insulation class	class 1	class 1	class 1	class 2
Power input	1 A	1 A	1 A	0.2 A
Opening time	2÷10 s/90°	1.5÷5 s/90°	1.5÷5 s/90°	3 s/90°
Operating temperature	-20°C / +55°C (-10°C / +50°C with batteries)	-20°C / +55°C (-10°C / +50°C with batteries)	-20°C / +55°C (-10°C / +50°C with batteries)	-20°C / +55°C (-10°C / +50°C with batteries)
Protection rating	IP 31	IP 31	IP 31	IP 12D
Product dimensions	105x128x600 105x128x830 (with batteries)	105x128x600 105x128x830 (with batteries)	105x128x600 105x128x830 (with batteries)	80x90x450
Approvals		TÜV	TÜV	
Control panel	EL12E	99	99 + Brake	165

# Technical specifications and system functions

Main system and control panel functions				
	WEL E	WEL M	WEL S	SPRINT
Control Panel	EL12E	99	99 + Brake	165
Description	for 1 motor 24VDC	for 1 motor 24VDC	for 1 motor 24VDC	for 1 motor 24VDC
Mains power supply	 230 V~ / 50-60 Hz	 230 V~ / 50-60 Hz	 230 V~ / 50-60 Hz	 230 V~ / 50-60 Hz
Batteries	■ (optional)	■ (optional)	■ (optional)	■
Energy saving 	energy saving when in use	energy saving when in use	energy saving when in use	energy saving when in use
Motor power supply	24 V= / 8 A	24 V= / 10 A	24 V= / 10 A	12 V= / 5 A
Power supply accessories	24 V= / 0.3 A	24 V= / 0.5 A	24 V= / 0.5 A	24 V= / 0.15 A
Electrically operated lock	24 V= / 1.2 A	24 V= / 1.2 A	24 V= / 1.2 A	24 V= / 1.2 A
Limit switch provision	■	■	■	
Encoder		■	■	■
Force adjustment control		electronic	electronic	
ODS - Obstruction detection system		■	■	■
Speed adjustment	■	■	■	■
Braking / Slowing down	■	■	■	■
Open control	■	■	■	■
Push opening - PUSH & GO	■	■	■	■
Close control		■	■	■
Automatic timed close control	■	■	■	■
Stop safety device	■	■	■	■
Emergency reverse	■	■	■	■
Safety test facility		■	■	

## Approvals and characteristics



### PUSH & GO

A light push is all that is needed to automatically open the door

### LOW ENERGY

Opens and closes the door with reduced energy and speed

# Wel

**New, fully featured, sturdy, versatile and quiet. Packed with features.**

Wel is the new automation for automatic swing doors. Designed to offer a versatile and fully featured solution, this automation boasts a set of distinctive features, allowing it to be used in a wide range of operating conditions:

- opened and closed by a motor;
- opened by a motor and closed by a spring;
- on emergency exits;
- low energy for disabled access.

Sturdy, hard wearing and quiet, it is ideal for very heavy duty applications. The automation boasts a new and smart design and very clean lines. Wel complies with the strictest European and American standards.

This automation is available in different versions: E, M and S.

## Wel M

**Sturdy and versatile, ideal for very heavy duty applications.**

A must in all demanding environmental conditions, such as external doors exposed to the wind and to the elements.

## Wel E and Wel S

**Practical, reliable and quiet. Packed with features.**

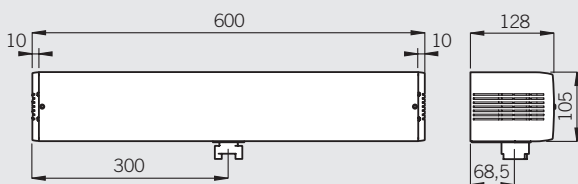
To make sure the door is closed even in the event of power failure, it is advisable to select an automation opened by a motor and closed by a spring, preferably motor-assisted, such as Wel S. This solution allows the door to be manually opened and closed by a spring.

Sturdy, reliable and quiet, these automations have been designed to offer a versatile and fully featured product, suitable for heavy duty applications, even with very heavy door wings.

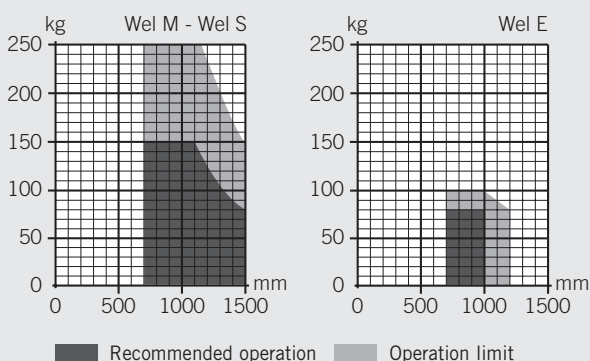
Wel S uses the Brake system to control the closing and approaching speed even in the event of power failure.

Wel E is not fitted with a Brake system, but features a simplified version, still able to control the closing operation.

## Dimensions



## Operation diagram





# Specific functions and features

## A rich set of functions.

The new Wel offers a wide range of electronic, mechanical and special functions to adapt the automation to meet different operational requirements.

### Electronic functions

Automatic functions:

- thrust limiter
- obstacle detector with adjustable thrust

Operating modes:

- Push and Go
- electrically operated lock control modes:
  - normal mode (working current or “fail secure” - wing remains shut even in the event of power failure);
  - anti-panic mode (idle current or “fail safe” - wing remains shut only if power is available. In the event of faults or power failures, users can still exit the room)
- electrically operated lock latching control: the operating speed may be increased when approaching the electrically operated lock to ensure correct latching operation
- electrically operated lock release control: an option may be enabled to ensure that the electrically operated lock is correctly released
- wind-proof facility

The Wel release system may be controlled by using the TEL2 or DMCS remote control. The automation can therefore be adapted to different types of existing locks, to the features of the door (weight - strength - opening problems) or to environmental conditions (different indoor-outdoor pressures).

As compared with the above, Wel E is a “simplified” product. It therefore does not include the following features: obstacle detector with adjustable thrust, lock type control (Wel E only controls the normal lock) and electrically operated lock release control. For light to medium weight doors, the Wel E is a simpler and more cost effective alternative to version Wel S.

Wel automation features a FA limit switch, which allows the following operations to be carried out:

WEL S, WEL M: The limit switch is used to control the wing opening angle or, by changing the connection, to bypass safety devices for the last opening section. Using the FA limit switch is optional therefore, if the automation is fitted with a door stop and does not open towards a wall, its use is not required. For applications where the wing opens towards a wall, the limit switch bypasses the operation of the sensors mounted on the wing so that they “do not see” the wall as an obstacle.

WEL E: This version does not feature an encoder; the FA limit switch is therefore used to slow down the opening action, regardless of whether a door stop is fitted or not.

### Mechanical functions

- Three different moving arms may be fitted: articulated, sliding or three-section (see accessories).  
The type of arm used may be selected from the electronic control panel, to ensure optimal operation in all conditions (with the exception of the Wel E version)
- the spring can be easily adjusted through the screw located on the front of the automation
- the closing speed can be adjusted even in the event of power failure by means of the Brake system PCB
- symmetrical automation to simplify installation
- guard extension head to fully cover the opening if batteries are used or for double automation control (with the exception of the Wel E version).

### Special functions

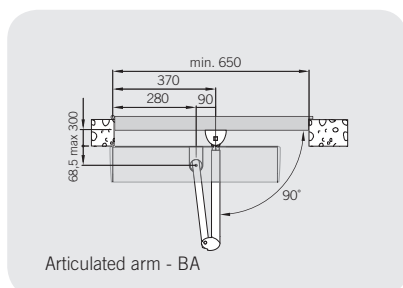
- Low energy
- escape routes - being certified to DIN 18650 standard, it may be fitted to emergency exits.

The automation features a reversible reduction unit to allow manual operation in the event of power failure.

## Movement arms

### WEL BA

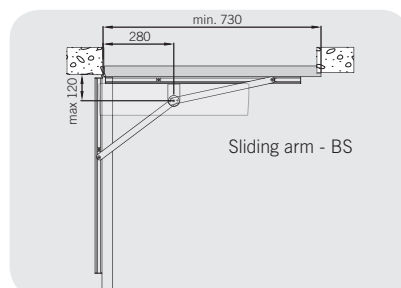
Articulated arm for doors which open outwards, actuator side



Articulated arm - BA

### WEL BS

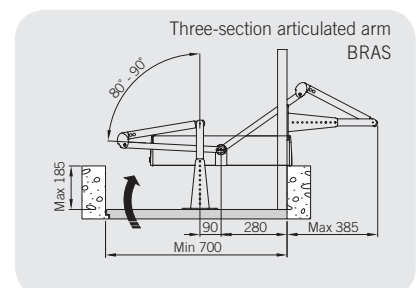
Sliding arm for doors which open inwards, actuator side



Sliding arm - BS

### WEL BRAS

Three-section articulated arm for doors which open inwards, actuator side



Three-section articulated arm  
BRAS

### WEL BSS

Break-out sliding arm, to break out the wing from the opposite side to the normal opening side.

In emergencies, the arm allows door break-out towards the opposite side to the normal opening side, i.e. towards the outside of the wing.

# Sprint

Small in size. Big in performance. Ideal for residential use.

Compact and light automation, ideal for residential use. It is supplied with a back-up battery, located inside the automation, and with an ON/OFF switch, located in an easily accessible position.

## Ensures an easy and practical access.

The automation also allows the user to select the Low Energy and Push and Go modes.

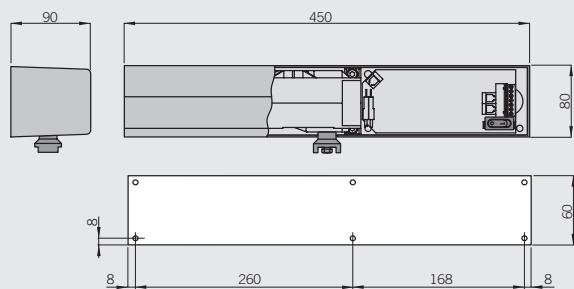
The Low Energy facility allows the door to be opened and closed with reduced energy and speed, making the Sprint automation particularly suitable for less able bodied users. The Push and Go facility, also supplied as standard, is essential when automatic opening enabled by an initial manual push is required.

## Practical, safe and reliable.

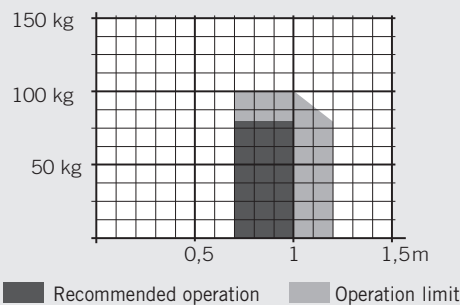
Sprint features a standard anti-crushing device, which makes it safer and more reliable, as it can be manually operated even in the event of power failure. These and other unique features make Sprint one of the world's leading automations for swing doors for residential use.



## Dimensions



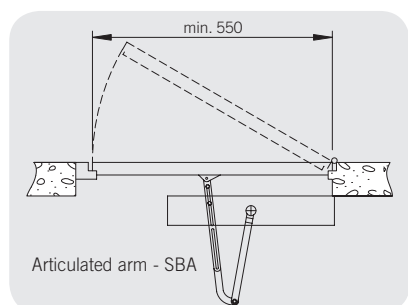
## Operation diagram



## Movement arms

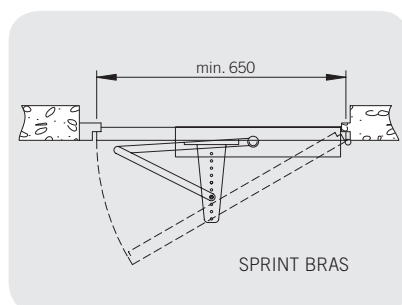
### SBA

Articulated arm.



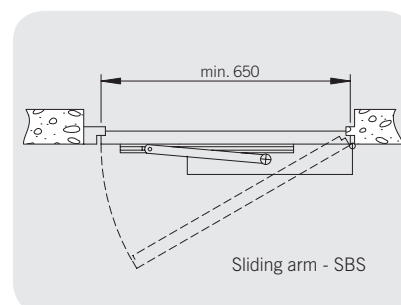
### SPRINT BRAS

Three-section articulated arm for doors opening inwards, automation side.



### SBS

Sliding arm.



# Automation complementary accessories

## Facility programmers with or without key lock

### COM

These are new mechanically and digitally operated electronic programmers, designed to select and set the desired operating modes for one or more automatic doors.

These programmers can easily be used with either sliding or swing doors by simply replacing the front template, supplied as standard.

The type of automation is automatically detected as soon as it is connected.



### COM E

#### New and smart looking

COM E is the new digital electronic selector switch, designed to set up the 99 electronic control panel operating modes, in order to control one or more Wel automations.

The unit consists of a microcontroller, with front keypad and LED indicator. It may be surface or flush mounted on a wall, and has been designed to be compatible with standard square electrical switches and sockets.

#### Operating options

- COM E can be used to set up up to 4 doors in the same mode;
- Two COM E may be connected together on the same automation;
- COM EL is a practical and useful accessory used to key lock the automation from the outside, with matching lock;
- TEL RC is the infrared beam receiver unit, which may be fitted inside the COM E selector switch, which allows the settings for the automation to be controlled by means of remote control TEL 2.

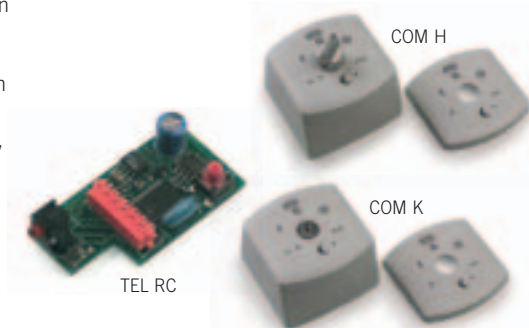
### COM H and COM K

They are new rotary programmers, used to set up the different operating modes of automatic doors.

Available in two versions: handle (COM H) or key (COM K) operated, they are supplied with two interchangeable front panels, for sliding or swing doors.

The control unit is a 6 position, rotary electromechanical selector switch.

These units can also be surface or flush mounted on a wall, and have been designed to be compatible with standard square electrical switches and sockets.



## Area Sensors

These are advanced electronic sensors detecting a person standing or going through a specific area in front of the entrance, which control door opening, and also ensure safety on passing through.



### Active infrared sensors

Active sensors able to monitor the approach movement and/or static presence of a person, with the option of adjusting the width of the area concerned and depth of detection, in addition to use levels and operative frequency.



### Passive infrared sensors

They feature the following facilities (according to models):

- sensitivity adjustment and opening selection;
- opening range zoom adjustment.



### Microwave sensors

One- or two-way area sensor system, which may also be wall and ceiling mounted, by using a special mounting. Accurately detects motion.

Settings can also be remotely changed by means of a remote control.

## Specific Wel Accessories

### WEL TP

Head fitted with pushbuttons.

Note:  
WEL TP may be used instead of the COM E-H-K selector switches.



### WEL D40

Spacer H 40 mm for operating arms.

### WEL TI

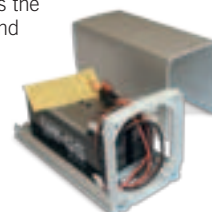
Guard extension kit to fully cover the opening. The kit consists of two small heads which act as a blanking casing between two automations. After cutting the aluminium profiles to the required size to blank the opening, the heads can be used to allow the blanking casing to be connected to the automations.



### WEL BAT

Battery kit to operate the automation in the event of power failure.

The automation features the same covering profile and may be fitted either on the motor or control panel side by using the extension small head.



## Accessories

The vast range of DITEC accessories offers access systems with various different command and control options.



### REM - Active infrared barriers

REM are active area barriers to protect and/or detect people or objects. One or more infrared beams are emitted by the device and are reflected by an obstacle located in the detection area, which triggers the output contact. The sensitivity is practically unaffected by the colour or structure of the object surface. The detection beam range and angle may be adjusted to meet all installation requirements.



### Lan 7 control device with proximity control

Remote identification system with TRANSPONDER technology. Detection without friction command.



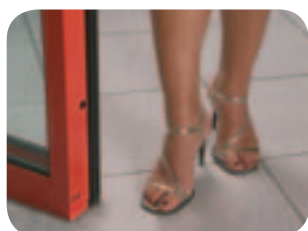
### Lan 4 digital selector switches

With anti-vandalism digital combination keypad. Secret code up to 8 figures.



### Xel 5 key operated selector switch

With anti break-in or anti-vandalism device. Can be wall or column mounted.



### Safety photocells

They offer more control in obstacle detection. Practical and almost invisible, they may be fitted at different heights.



### Sensitive floor platforms

These platforms can be positioned under door mats, where they detect motion and automatically open the door.



### Control pushbuttons

They allow users to open the door by lightly pressing them or touching them with their hand.

When building the system, only use DITEC accessories and safety devices.

DITEC automations all feature CE marking and are designed and built in compliance with the safety requirements of the Machinery Directive (2006/42/EC), of the Electromagnetic Compatibility Directive (2004/108/EC) and of the Low Voltage Directive (2006/95/EC) and of other Directives, laws, specific standards for special products and situations.

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Further information can be found in the Technical Manuals available at the website: [www.ditec.it](http://www.ditec.it)



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