Wel Sprint

Swing door automations

DiTEC

AUTOMATIC ENTRANCE SPECIALISTS

▶ Swing door automations

Swing doors may all seem alike, but if you want to automate them there are several different operational requirements to take into consideration.
DITEC offers 4 automation models.

▶ Range of products

	Wel M	Wel S	Wel F	Sprint
Swing door automation	motor opening and closing	motor opening, spring closing	motor opening, spring closing	motor opening and closing
Special use	low/full energy escape routes*	low/full energy escape routes*	fire-proof doors	low/full energy
Duty	very heavy	very heavy	heavy	very heavy

*type-testing in progress

▶ Technical characteristics

	Wel M	Wel S	Wel F	Sprint
Capacity	250 kg x 1 m 150 kg x 1,5 m	250 kg x 1 m 150 kg x 1,5 m	class 5: 100 kg x 1,25 m class 6: 120 kg x 1,4 m	100 kg x 1 m 80 kg x 1,2 m
Intermittence	S2 = 30 min - S3 = 80%	S2 = 30 min - S3 = 80%	S2 = 30 min - S3 = 80%	S2 = 30 min - S3 = 80%
Power supply	230 V AC / 50-60 Hz	230 V AC / 50-60 Hz	230 V AC / 50-60 Hz	230 V AC / 50-60 Hz
Insulation rate	1	1	1	2
Current	1 A	1 A	1 A	0,2 A
Opening time	1,5÷5 s/90°	1,5÷5 s/90°	1,5÷5 s/90°	3 s/90°
Working temperature	-20°C / +55°C (+5°C / +40°C batteries)	-20°C / +55°C (+5°C / +40°C batteries)	-20°C / +55°C	-20°C / +55°C (+5°C / +40°C batteries)
Protection degree	IP 31	IP 31	IP 31	IP 12D
Size	105x128x600 105x128x830 (with batteries)	105x128x600 105x128x830 (with batteries)	105x128x830	80x90x450

▶ Wel

New, multi-functional, solid, adaptable and noisless.
Wel is the new automation for automatic swing doors. Its distinctive features make it an all-purpose product which can be used in different operational situations:
- with motor opening and closing;
- with motor opening and spring closing;
- on escape routes;
- on fire-proof doors;
- low energy for the disabled.
Wel is a solid, hard-wearing, heavy-duty and noisless automation which can be used also on doors with two synchronized wings (master-slave function). Its new design makes Wel stand out for its elegant and clean lines.
Wel complies with the strictest European regulations.

FRIENDLY

PUSH AND GO
A gentle push
for automatic opening

LOW ENERGY
Opening and closing
at reduced speed and energy

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▶ Automation duty and range of products

This automation comes in three versions M, S and F.

▶ Wel M

Sturdy and versatile, ideal for very heavy duty
It is essential in case of demanding environmental conditions, such as external doors exposed to the wind and unfavourable weather conditions.

▶ Wel S

Practical, reliable, noiseless and multi-functional
If you want to be able to close the door even in the event of power failure, it is advisable to choose an automation with motor opening but spring closing, possibly motor-assisted, like the S version. Thus the door opens manually and closes thanks to spring action.
Strong and noiseless.
Conceived to be a versatile product, it is suitable even for very heavy duty and very heavy wings.
Wel S uses Brake system for closing speed and proximity speed adjustment, even in the event of power failure.

▶ Wel F

For heavy duty on fireproof doors.
The fireproof automation Wel F is used when it is necessary to isolate areas where fire can break out. For doors opening outward with actuator on one side an articulated arm only can be used.

▶ Functions and distinctive features

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

Electronic functions
Automatic functions:
- thrust limitation;
- obstacle detection with adjustable thrust.
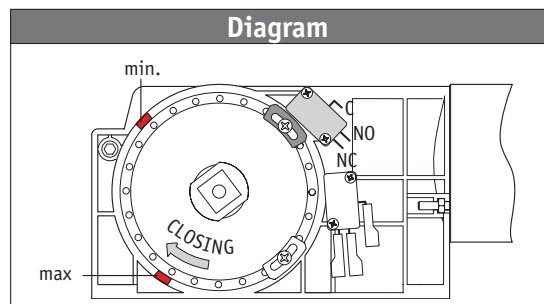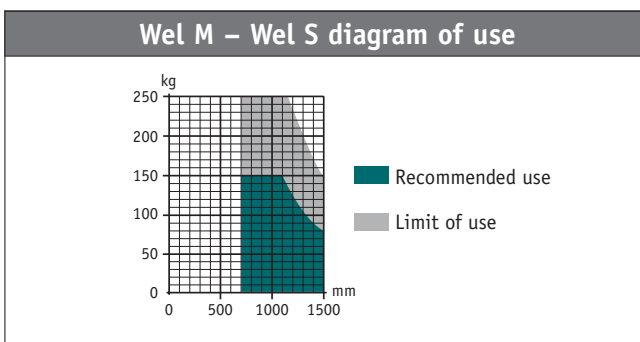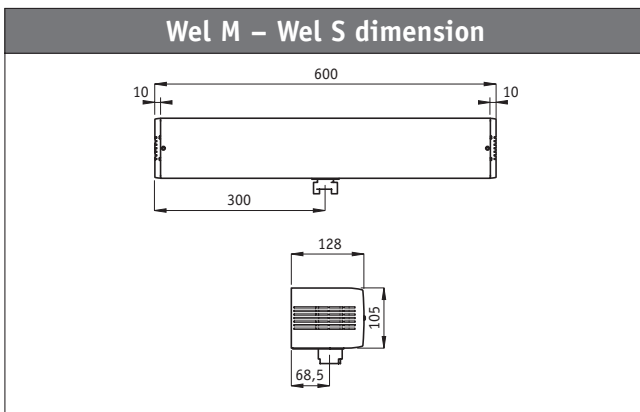Operation mode:
- Push and Go;
- Electric lock management:
  · normal (working current or fail secure – wing remains closed and locked even in the event of power failure);
  · anti-panic (idle current or fail safe – wing remains closed and locked only if power is present. Thus it allows exit in case of breakdowns or power failure);
- electric lock fastening management: speed can be increased near to the lock to enable proper fastening;
- electric lock release management: a special option can be chosen to enable proper lock release;
- wind-proof.

Wel lock release system can be adjusted through TEL2 or DMCS remote controls.
Thus the automation can be made suitable for different types of locks, door features (weight – solidity – opening problems) or environmental characteristics (different pressure outside-inside).

FA limit switch, which comes as a standard in Wel automation, enables the following functions:
WEL F: limit switch adjusts wing opening angle. It simulates a backstop.
WEL S, WEL M: limit switch adjusts wing opening angle or, by changing the link, excludes safeties for the last stretch of the opening. In case of a wing opening toward a wall, this allows wing sensors exclusion so that they "do not see" the wall as an obstacle.

Wel M – Wel S dimension

Wel M – Wel S diagram of use

Recommended use
Limit of use

Diagram

Mechanical functions
- Three different arms can be used: articulated, sliding or three-sector ones (see accessories). The type of arm can be selected from the electronic control panel, to enable best movement in all situations;

- trouble-free spring adjustment through front screw;
- closing speed adjustment even in the event of power failure thanks to the Brake board;
- symmetry of automation for simplified installation;
- transom extension head for full doorway covering, in case batteries or operation boards for fireproof doors or for double automation management are used.

Special functions
- Low energy;
- fireproof;
- escape routes – it can be fitted on escape routes thanks to the type-testing in progress according to DIN V 18650 directive;
- perfect movement synchronization, for two-wing automation, thanks to the serial connection between the automations (master-slave function).

It is provided with a reversible reduction unit, for manual movement in the event of power failure.

▶ Special accessories

WEL BA: articulated arm for doors with outward opening and side actuator.

WEL BS: sliding arm for doors with inward opening and side actuator.

WEL BRAS: three-sector, articulated arm for doors with inward opening and side actuator.
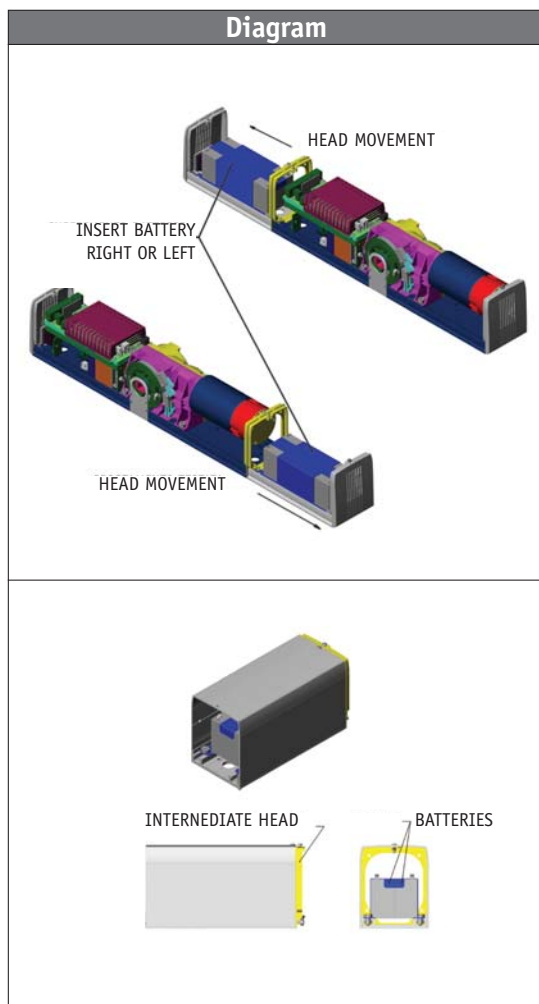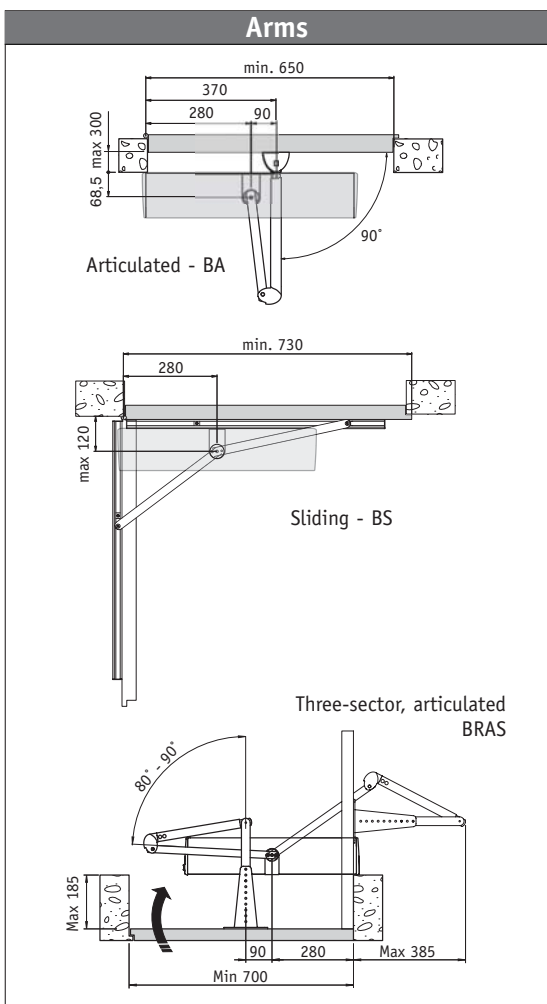
WEL BSS: break-out, sliding arm for wing break out on the opposite side of the normal opening. As it can be used only with WEL BS sliding arm, in case of danger, it allows break-out towards the side opposite the normal opening, i.e. towards the outside of the wing.

WEL FC: limit-switch kit provides a special signal (e.g. door closed signal, etc.); supplementary on WEL M, standard on other versions.

WEL TP: Head with buttons.
Note: if WEL TP is used, COM E –H – K selectors can not be used.

WEL TI: transom extension kit for full dorway covering. The kit consists of two small heads which make up a sort of telescopic transom between two automations. After the aluminium sections have been cut to the right measure, the telescopic transom can be connected to the automations thanks to the two heads.

WEL BAT: battery kit which enables the automation to work in the event of power failure. It is housed in the same covering section as that of the automation and can be added either on the side of the motor or on that of the control panel by means of the extension head.

Arms

min. 650
370
280 90
68,5 max 300
90°
Articulated - BA

min. 730
280
max 120
Sliding - BS

Three-sector, articulated BRAS
80° - 90°
Max 185
90 280 Max 385
Min 700

Diagram

HEAD MOVEMENT
INSERT BATTERY RIGHT OR LEFT
HEAD MOVEMENT

INTERNEDIATE HEAD   BATTERIES

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▶ Main functions of the installation and of the control panels

Control panel	WEL M 99	WEL S 99 + BRAKE	WEL F 99 + BRAKE + FIRE	SPRINT 165
Batteries (enable functioning in the event of power failure)	/ (optional)	/ (optional)		/
Number of motors	1	1	1	1
Motor power supply	24 V DC / 8 A	24 V DC / 8 A	24 V DC / 8 A	12 V DC / 5 A
Accessory power supply	24 V DC / 0,5 A	24 V DC / 0,5 A	24 V DC / 0,5 A	24 V DC / 0,15 A
Electric lock	24 V DC / 1,2 A	24 V DC / 1,2 A	24 V DC / 1,2 A	12 V DC / 1,2 A
Provision for limit switch	/	/	/	
Encoder (the system recognizes mechanical stops through learning operation and manages speed and slow-down during following operations)	/	/	/	/
Thrust adjustment	/	/	/	
ODS - obstacle detection (it stops or reverse operation in case of obstacle detection)	/	/	/	/
Opening speed adjustment	/	/	/	/
Closing speed adjustment	/	/	/	/
Brake down/Slow-down effect (it allows best proximity speed)	/	/	/	/
Opening control	/	/	/	/
Push opening	/	/	/	/
Closing control	/	/	/	
Timed automatic closing	/	/	/	/
Stop safety	/	/	/	/
Reverse safety	/	/	/	/

▶ Sprint

▷ Compact and high-performance. Ideal for residential use.

Limited weight and size make Sprint the ideal automation for residential use.

It is provided with a back up battery located inside the automation with an easily accessible ON/OFF button.

Passing through becomes comfortable and functional.

Low Energy and Push and Go modes can be selected.

Low Energy function enables low-speed and low-energy opening and closing, which is essential when the door has to be used by physically-impaired people.

Push and Go function is also standard.

It enables automatic opening by means of an initial manual push.

▷ Functional, safe and dependable

Sprint has a standard impact-free system which adds to the automation's safety, moreover it is dependable because it allows functioning even in the event of power failure. These and other distinctive characteristics make Sprint one of the world's leading automations for swing doors in the residential sector.

FRIENDLY | **PUSH AND GO**
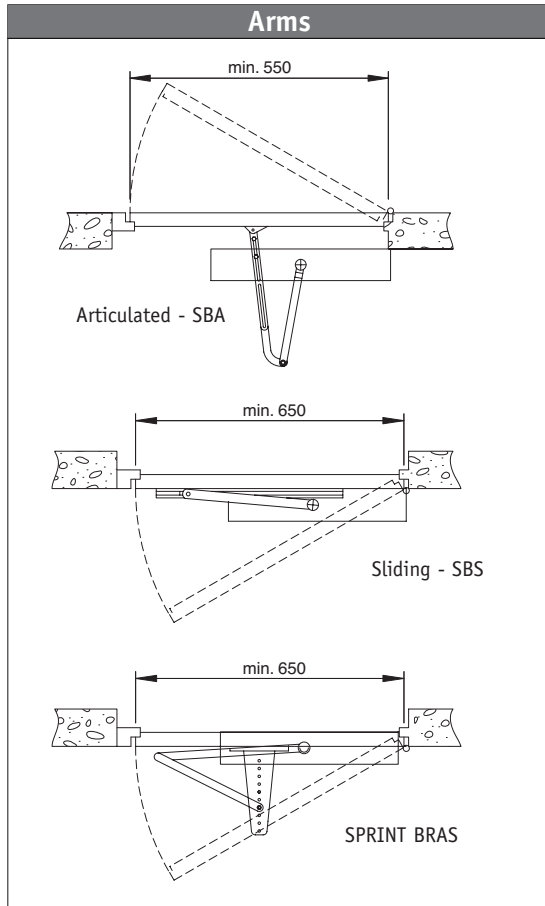A gentle push
for automatic opening

FRIENDLY | **LOW ENERGY**
Opening and closing
at reduced speed and energy

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◼▶ Special accessories

SBA: articulated arm - black painted steel.
SPRINT BRAS: three-sector, articulated arm for inward opening on the automation's side.
SBS: sliding arm - EURAS CO.

Arms

min. 550

Articulated - SBA

min. 650

Sliding - SBS

min. 650

SPRINT BRAS

◼▶ Automation complementary accessories

Every automation system must have management, control and safety devices compatible with all the component parts of the installation and complying with regulations.

◼▶ Program selectors with and without key lock

NEW

◼▷ COM

These are the new digital electronic and mechanical electronic program selectors to select and set desired operating modes for one or more automatic doors.
The system can be easily adapted to be used with sliding or swing doors by simply replacing the front keypad, normally supplied with the product. Recognition of the automation type to which it is connected is automatic.

◼▷ COM E
New and elegant

COM E is the new digital electronic program selector to set type 99 electronic control panel operating modes, to manage one or more Wel automations.
It consists of a unit provided with a micro-controller, with front keyboard and signalling LED.
Conceived for wall fastening, either surface or flush mounting, it has been designed with a size compatible with the square standard for switches and electric sockets.

Possible operations
- COM E can set the same mode for up to 4 doors;
- Two COM Es can be connected to the same automation;
- COM EL is a functional accessory, available for external key lock;
- TEL RC is the infra-red beam receiving module, which can be housed inside COM E selector, and which, by means of TEL 2 remote control, enables to manage the parameters of the automation to which the selector is connected.

COM E

COM EL

◼▷ COM H and COM K

These are the new function analogue program selectors, to set various operating modes for automatic doors. Two versions are available: with actuation by handle (COM H) or by key (COM K). Both are provided with double interchangeable keypad for sliding or swing doors.
The control unit is a 6-position, rotary electromechanical changeover switch.

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These units as well are conceived for wall fastening either surface or flush mounting, and have been designed with a size compatible with the square standard for switches and electric sockets.

COM H

COM K

TEL RC

▧▷ Volumetric sensors

These are advanced electronic sensors detecting people presence or passing through in a specific area before the entrance. Their function is to start the door opening and grant safe passing-through.

▧▷ Passive infra-red sensors

They feature the following characteristics (depending on models):
- sensitivity adjustment and opening selection;
- opening area zoom adjustment.

▧▷ Microwave sensors

One- or two- direction volumetric system, available also with wall and ceiling fastening, by means of special bearing. Accurate movement assessment. Parameters can be modified also by remote control.

▧▷ REM

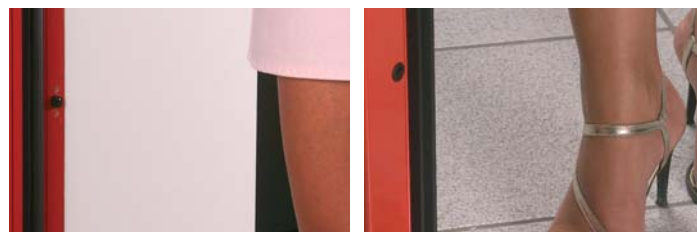### ▧▷ Active infra-red barriers

NEW

Rem are active volumetric barriers conceived for people and object protection or/and detection. One or more infra-red beams are emitted by the device and are reflected by an obstacle located in the detection area, which triggers the output control.
Sensitivity is not influenced by the colour or the structure of the object surface. Detection beam range and position can be adjusted according to installation requirements.
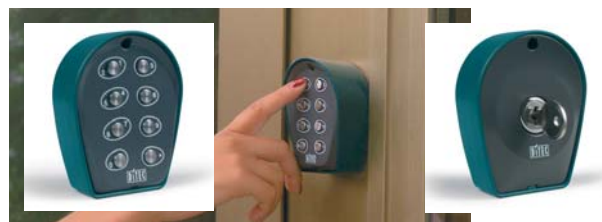
▧▷ Safety photocells

These functional and almost invisible photocells provide for a greater accuracy in the detection of possible obstacles and can be mounted at any height.

▧▷ Key or digital selectors

These allow entry only to authorized staff. They can be easily mounted anywhere inside or outside. Key and keypad models with vandal-proof combination are available.

▶ Touch-button opening sensors or control sensors using transponder technology

Door opening is trouble-free thanks to buttons or codified cards which make these sensors the perfect solution for company or condominium entrances or wherever access control is desired.

▶ Control buttons

These allow door opening simply by means of a gentle pressure or touch.

▶ Floor sensitive mats

If positioned under doormats, they detect presence and start door opening.

▶ Regulations

Use only DITEC accessories and safety devices for automation system installation.

DITEC actuators are CE-marked.
They are designed and built in compliance with the safety requirements defined in the Machinery Directive (98/37/EC), Electromagnetic Compatibility Directive (89/336/EEC) and Low-Voltage Directive (73/23/EEC). DITEC S.p.A. reserves the right to make any changes whatsoever in order to upgrade its products.

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