Dítec
OPEN YOUR WORLD

SMART

ENERGY SAVING

24 V VIRTUAL ENCODER
SAFE

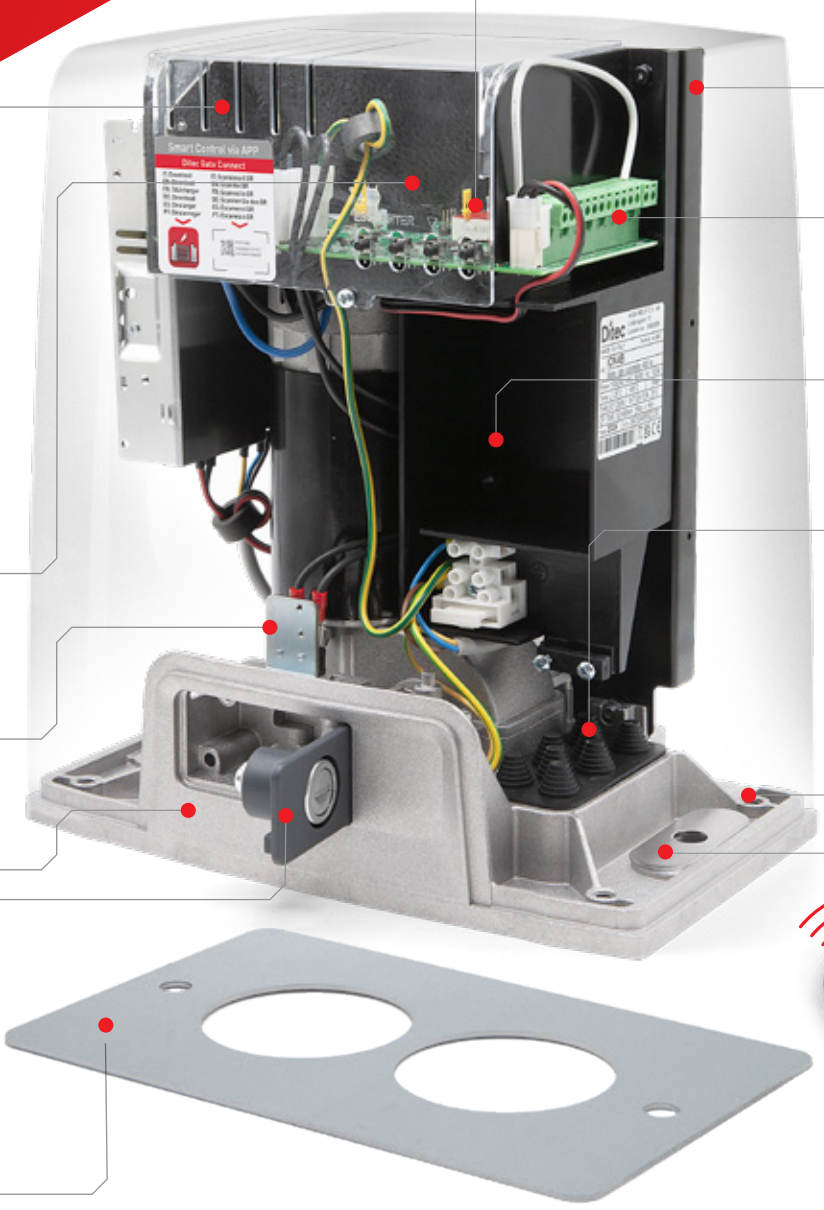
Automation for sliding gates up to **600 kg**

Ditec **ION B**

EN

Ditec **ION B**

Ditec ION B is the range of electromechanical actuators for sliding gates designed to guarantee quality, sturdiness and reliability over time, and to facilitate their installation and maintenance.
The range includes **two motor sizes, one for 400 kg and one for 600 kg gates**, both featuring on-board multi-function control panel with built-in bi-frequency radio receiver and Bluetooth.



Two-digit display and navigation pushbuttons for easy configuration of settings and diagnostics

Steel **support plate**

Accessible **terminals** for easy installation

Digital control panel protected by removable transparent plastic

Provision for high-efficiency NiMH batteries

Slot for safety-command **module cards** (e.g. self-testing safety edges and magnetic-loop motion detector)

Rubber protective cover prevents entry of dust and insects

Release microswitch for greater safety when the automation is released

Adjustable height ensures perfect coupling with the rack thanks to the slots of the base and the levelling screws

aluminium die-casting to ensure greater sturdiness

Steel reinforcement **plates**

Ergonomic and easy-to-use **release handle**

Steel plate complete with anchoring clamps ensuring secure fastening to the ground

transmitter

FULL COMPLIANCE WITH EU DIRECTIVES AND STANDARDS

- **2006/42/CE -** Machines Directive - regarding the following essential health and safety requirements 1.1.2, 1.1.3, 1.2.1, 1.2.2, 1.2.3, 1.2.4.2, 1.2.6, 1.3.9, 1.4.3, 1.7.2, 1.7.3, 1.7.4, 1.7.4.1, 1.7.4.2
- **2014/30/EU - EMCD -** Electromagnetic Compatibility Directive
- **2014/53/EU - RED -** Radio Equipment Directive
- **2011/65/EU -** Restriction of hazardous substances (RoHS 2)
- **2015/863/EU -** Restriction of hazardous substances (RoHS 2 Amendment)
- **Harmonised EU Standards:** EN 60335-1; EN 60335-2-103; EN 12453; EN IEC 55014-1; EN IEC 55014-2; EN IEC 61000-6-1; EN IEC 61000-6-3; ETSI EN 300 220-1; ETSI EN 300 220-2; ETSI EN 300 328; ETSI EN 301 489-17; ETSI EN 301 489-1; ETSI EN 301 489-3; EN IEC 62311; EN IEC 62368-1
- **Other standards/technical specifications applied:** IEC 60335-1; IEC 60335-2-103: IEC 62368-1

Ditec **ION B**
a versatile product

- **Bi-frequency radio receiver and built-in Bluetooth chip:** thanks to the new RCB100E radio receiver module, both 433.92 MHz (default) and 868.35 MHz frequencies are available
- **Rapid self-learning procedure**, which automatically records all stopping positions in two operations, self-adjusting to the most diverse installation contexts
- **Retrofit steel plate** (optional) to **avoid building work** in the case of replacement of existing Ditec or competitor automation
- Ready for **magnetic limit switches** for a more accurate adjustment of stopping points in opening or closing
- The **temperature sensor** fine-tunes the gear motor performance in the event of cold, ice and snow (NIO - No Ice Option function) and **protects the motor in the event of overheating**
- In the event of an emergency, it is possible to release **Ditec ION B automation remotely**. And that's not all! You can lock again the automation without having to act manually on the motor
- **Battery voltage-level display** to check the battery status

Automation efficiency level detection

- Ditec ION B is able to measure the level of efficiency of the installation, and provide feedback on the detected mechanical performance of the gate or on the choice of the automation. Mechanical maintenance could be recommended to restore efficiency or the adoption of an automation with higher performance may be suggested (e.g., motor with higher power)
- During normal use, the level of efficiency is continuously monitored by the advanced control unit, updating the perceived degradation status in real time. In case of significative variances, a notification is provided to indicate that maintenance is required

Encryption AES-128 and Protected mode

- Ready to operate with the **AES-128** radio transmission encryption protocol, **making the use of cloned transmitters impossible**. Ditec ION B is capable of decrypting remote controls programmed with a **custom installation code** (Ditec **PROTECTED** Mode)

ION6B
IMPROVED PERFORMANCES FOR GATES UP TO 600 KG!

STEEL PINION

HIGH-PERFORMANCE SWITCHING POWER SUPPLY

LARGER PLATES FOR MORE STURDINESS

OPTIONAL ACCESSORIES

Emergency battery kit
24 Vdc NiMH batteries with battery charging board and wirings

Chain traction kit

Magnetic limit switches

Remote manual release

Racks
- nylon rack, complete with screws (integrated supports)
- steel rack, complete with screws and supports

Plate
- steel base perfect to simplify retrofit installations

SMART CONTROL

CONTROL AND MANAGEMENT
of automation with your smartphone

In the age of complete connectivity, gate and garage automations have become essential components of modern living. Integrating these automations offers access to an unprecedented level of convenience and security.

Utilizing the Ditec App and the Web app, it's possible to:

- Control and monitor the status of the gate or garage from anywhere, ensuring safe and smooth access
- Receive real-time notifications to keep track of access and security
- Simplify configuration and maintenance, reduce response time and improve efficiency
- Provide fast and effective remote support, monitor performance and resolve any problems in real time, ensuring superior service quality

Operational efficiency and reduced response times translate into economic benefits for both installers and end users, creating a win-win ecosystem for both parties.

Remote control functions available during 2025

New Ditec Apps and Cloud

Ditec GATE CONNECT PRO
for professionals / installers

COMING SOON

- **Startup and configuration**
  - Local or remote configuration and programming
  - Guided start up (wizard)
  - Retrieval of documentation, videos, training, ...
  - FW update procedure
- **Routine maintenance: standard professional activities**
  - Retrieval of information from the automation
  - Scheduling of intervention agenda based on number of cycles or time
  - Geolocation
  - Overview of events and access
  - Transmitter management
- **Extraordinary maintenance:**
  - Early intervention
  - Notifications if something unexpected happens
  - Remote diagnostics
  - Remote support and troubleshooting

Ditec GATE CONNECT
for end users

COMING SOON

- Local and remote control via app
- Status notification (e.g. gate is opening now,...)
- User management, access control via Bluetooth
- Creation of scenarios and scheduled events
- Manage installer permissions

ENERGY EFFICIENCY

The new **European Regulation 2023/826/EU** establishes **new eco-compatible design requirements for off mode, stand-by mode, and networked-stand-by energy consumption** of electrical and electronic household and office equipment within the scope of Directive 2009/125/EC.

It abrogates the previous Regulation 1275/2008/EC and its amendments, adding some specific product categories, among them **motor-operated building elements, like gate and door operators.**

The new European Regulation will become mandatory from May 2025.

ENERGY SAVING **< 0.6 W***

New **Ditec ION B consumes less in standby than regulatory requirements** with an active display and an active Bluetooth network device, thanks to:

- Switching power supplies (instead of transformer)
- High-efficiency control unit that reduces energy losses
- More precise control of output voltage and ability to better adapt to input voltage fluctuations
- Low heat dissipation leading to longer component life and higher reliability over time

*< 0.6 W networked equipment for ION4B
< 0.8 W networked equipment for ION6B

SMART CONTROL

Through **Ditec Cloud**, the automation for the sliding gate becomes an integral part of your lifestyle: local and remote **Smart Control** via Bluetooth and Wi-Fi; **user management**; **quick, guided configuration** to customize all automation parameters in just a few clicks; **stress-free maintenance and reduced intervention time**.

ENERGY SAVING

Automation aligned with new European standards in terms of **energy saving and standby consumption**: with an active display and an active Bluetooth (networked equipment) ION4B < 0.6 W and ION6B < 0.8 W.
High efficiency switching power supply and DC control unit.

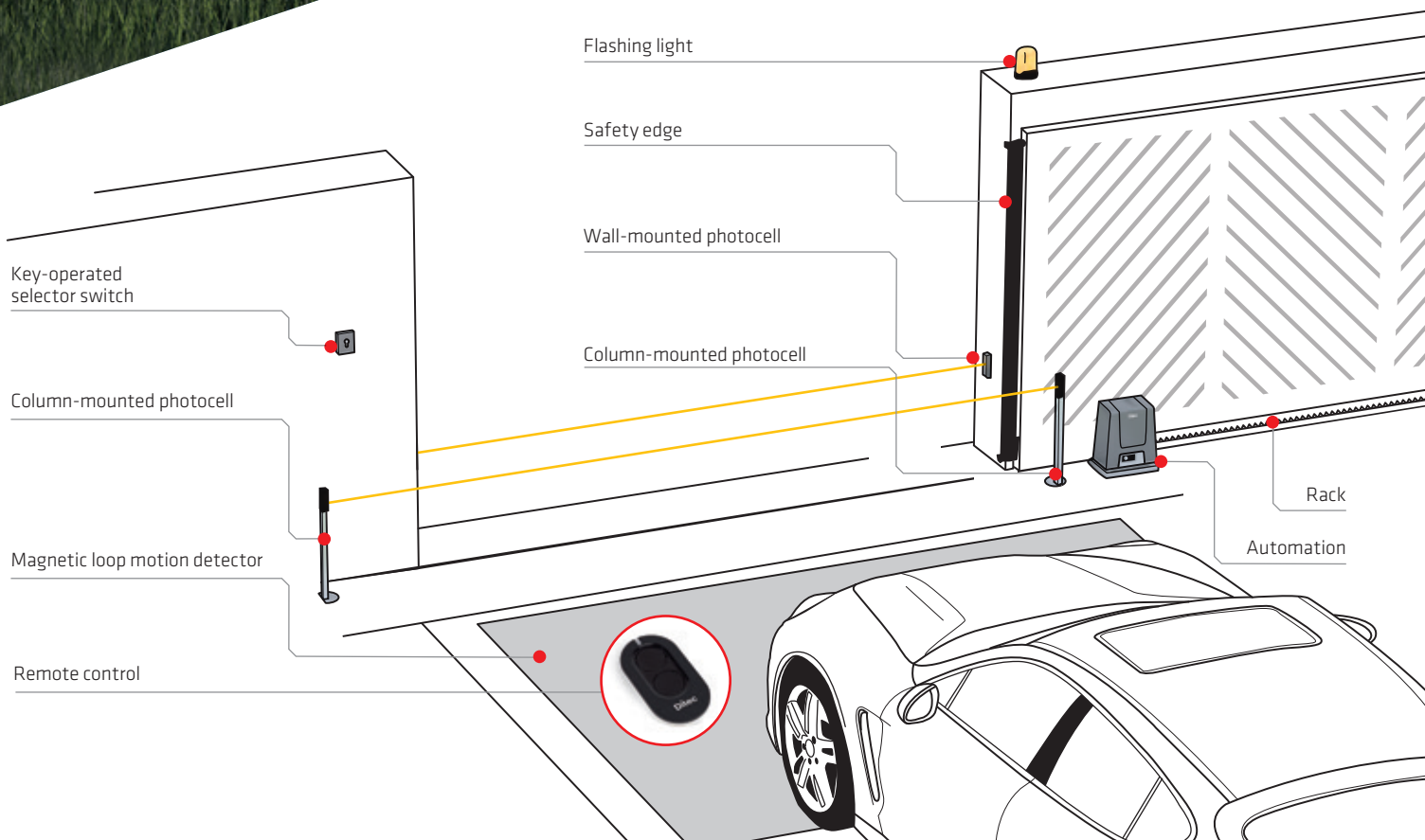
TOP-LEVEL SAFETY

24 V VIRTUAL ENCODER

For constant electronic monitoring of impact forces and immediate obstacle detection ensuring that the electromechanical actuator is stopped, or the motion is inverted (if configured). Optional **magnetic limit switches**. Additionally, in the event of a blackout, the electronic control panel intervenes activating the incorporated batteries (optional) which ensure correct operation of the system.

Discover the entire range of Ditec branded products at **www.ditecautomations.com**

Example of **installation**



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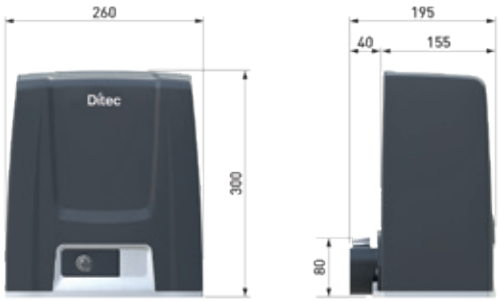

TECHNICAL SPECIFICATIONS

DESCRIPTION	ION4B	ION6B
Max. leaf weight	400 kg	600 kg
Stroke control	Virtual encoder	Virtual encoder
Maximum opening width	20 m	20 m
Service class	Intensive use Tested up to 150,000 cycles	Intensive use Tested up to 150,000 cycles
Power supply	100 Vac - 240 Vac 50-60 Hz	100-120 Vac - 200-240 Vac (selectable by switch), 50-60 Hz
Power absorption	24 Vdc	24 Vdc
Thrust	600 N pickup current	800 N pickup current
Opening and closing speed	0.1 - 0.3 m/s	0.1 - 0.3 m/s
Release system for manual opening	key operated	key operated
Intermittence	S2 = 60 min; S3 = 70% (T=25°C)	S2 = 60 min; S3 = 70% (T=25°C)
Cycles / hour*	40 (T=25°C)	40 (T=25°C)
Continuous cycles*	56 (T=25°C)	56 (T=25°C)
Operating temperature	-20°C/+55°C (-35°C/+55°C with NIO enabled)	-20°C/+55°C (-35°C/+55°C with NIO enabled)
Protection rating	IP 44	IP 44
Control panel	LCU50DC	LCU50DC

*Estimated cycles considering a 6-meter gate and factory settings (default speed of 20 cm/s). Different speeds may affect the maximum number of cycles. ION4B/ION6B allows a configurable maximum speed of up to 30 cm/s. A cycle is considered an opening followed by a closing.

MAIN FUNCTIONS OF THE SYSTEM

GENERAL DATA

Control panel	LCU50DC built-in
Radio module	RCB100E (433.92 - 868.35 Mhz selectable)
Bluetooth	built-in
Accessories power supply	24 Vdc / 0.3A
Limit switch provision	■
Energy saving	< 0.6 W for ION4B and < 0.8 W for ION6B Networked equipment
Operating temperature	-20°C +55°C in standard conditions -35°C +55°C with NIO enabled

INPUTS

Open control	shared with inching control, which can be selected from the display
Partial opening control	■
Close control	shared with emergency stop, which can be selected from the display
Stop control	■ or via radio
Inching control	■
Hold-to-run command	■
Automatic contact closing management (enable or disable automatic closing with external timer or a remote signal)	shared with partial opening control, which can be selected from the display

OUTPUTS

24 Vdc number of configurable outputs	2
- Flashing light	24 Vdc
- Electrically operated lock	■
- Gate-open warning light (ON/OFF)	■
- Gate-open warning light with proportional blink rate	■
- Courtesy light	■

PROGRAMMABLE FUNCTIONS

Stroke control	virtual encoder
Configuration of programmable functions	display and navigation keys via App
Opening and closing thrust	■ adjustable
Speed	■ adjustable
Soft Start / Soft Stop	■ adjustable
Automatic re-closing time	■ adjustable
Pre-flashing time in opening and closing	■ adjustable
Integrated datalogging (counter and recent alarm history)	■
Monitoring the level of automation efficiency	■
FW update	■

SAFETY AND PROTECTION FUNCTIONS

Emergency stop	■
Safe closing (inversion)	■
Automatic force adjustment during movement	■
D-ODS Dynamic Obstacle Detection system (automatic adjustment of the thresholds to reduce the possibility of false obstacle detection)	■
Execution methods for force detection tests in accordance with EN 13241-1	■

ACCESSORIES

Battery	■ with BBK750X2
Emergency release	■ with ASR2 and IONSBM
8.2 KΩ-resistance safety edge	■ with GOPAV
Magnetic loop detector	■ with LAB9

ICIM UNI EN ISO 9001:2015 SISTEMA DI GESTIONE CERTIFICATO
Cert. n. 0957/8

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