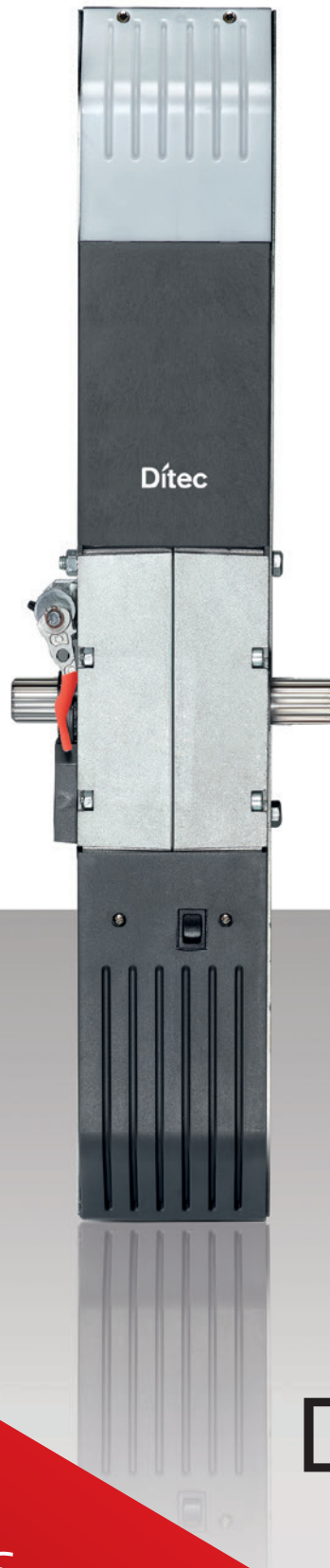




SMART



ENERGY
SAVING



SICURO

Automation
system for
up-and-over doors
with counterweights

Ditec **BOX B**

Ditec BOX B

Ditec BOX B is designed to simplify the work of installers, offering a safe and reliable solution for the automation of counterweighted overhead doors with standard panels, fully retractable doors, or articulated doors.

Ditec BOX B combines **reliable, time-tested mechanics** with **new advanced electronics**, offering safe automation even in intensive use contexts.

With a single operator, Ditec BOX B automates doors up to 7 m²; with two motors in parallel, it manages surfaces up to 12 m².

The multifunction control panel is integrated directly into the operator, simplifying installation and reducing time and complexity. The gear motor is fixed to a solid steel plate, while the electronic board and power supply are protected by a resistant and compact ABS casing.

The courtesy light turns on automatically when the door opens or can be controlled with a dedicated command. The dual-frequency radio receiver and integrated Bluetooth® module ensure flexible and secure control.

steel **base plate**

built-in **courtesy light**

Pre-mounted **limit switches** (on DOITBXBL)

manual release

opening pushbutton

Integrated switching power supply for greater energy efficiency and low heat dissipation

high-efficiency **digital panel**

two-digit display and navigation buttons to facilitate parameter configuration and diagnostics

FULL COMPLIANCE WITH EU DIRECTIVES AND STANDARDS

- **2006/42/CE** - Machines Directive
- **2014/30/EU - EMC** - 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)
- **2023/826/EU** - Stand-by consumption
- **Other standards/technical specifications applied:** EN 60335-1; EN 60335-2-95; EN IEC 55014-1; EN IEC 55014-2; EN IEC 61000-6-1; EN IEC 61000-6-3; ETSI EN 301 489-1; ETSI EN 301 489-3; ETSI EN 301 489-17; ETSI EN 300 220-1; ETSI EN 300 220-2; ETSI EN 300 328



Ditec BOX B

unique features

- **Radio receiver bi-frequency**, thanks to new RCB100E radio receiver module, available both 433.92 MHz and 868.35 MHz (default: 433.92 MHz)
- **Rapid self-learning procedure**, which automatically records all stopping positions in two operations, self-adjusting to the most diverse installation contexts
- **The switching power supply** ensures high energy efficiency, minimizing losses and heat dissipation. This translates into **longer system life and reliability**, as well as ensuring precise output voltage control and better adaptability to power supply variations.
- **Cam limit switch** for more accurate adjustment of opening and closing stop points
- 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 case of emergency, the **Ditec BOX B automation can be easily unlocked** using an external key, if a hole has been made in the door, or using the optional BOXSBC accessory



Automation efficiency level detection

- Ditec BOX 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 significant variances, a notification is provided to indicate that maintenance is required



Encryption AES-128 and Protected mod

- 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)

INSTALL THE AUTOMATION SYSTEM

in less time

- the automation system is designed to enable **and easy mounting**, avoiding any structural changes to the door
- **Control panel quick and easy to program** thanks to the integrated display for advanced adjustment of movement parameters: opening and closing speed, thrust on obstacles, customizable slowdowns and approaches, intelligent obstacle management with automatic disengagement maneuvers or movement reversal.
- **manual release** by means of an internal lever or with a key from outside. A metal-cord **release system** is also available to connect to the handle on the wing (optional)
- manufactured ready for installation with a **built-in control panel and an assembled limit switch**

SPECIFIC ACCESSORIES



- **Motor fastening base** (2.5 m)
Preparation to be welded on the curtain



- **Set of transmission accessories for central mounting**
(max curtain width 3.4 m)



- **Release system**
Cord-release system for connection to handle



- **Pair of straight arms**



- **Pair of curved arms**



- **Limit switch unit**



- **Grooved bush with dowel**

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.



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.

This regulation repealed the previous Regulation 1275/2008/EC and extended the scope to some specific categories of products, including motor-driven building elements, such as gate and door operators.

The new European regulation came into effect as of May 2025.



**ENERGY
SAVING < 0,8 W**

New Ditec BOX 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 traditional power supplies (e.g. transformer)
- High-efficiency control unit developed using state-of-the-art technology 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

< 0.8 W for BOX3BH with Bluetooth® and active displays



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) BOX3BH < 0,8 W. High efficiency switching power supply and DC control unit.



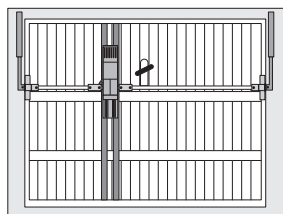
24 Vdc

The **24 Vdc virtual encoder technology** provides **continuous electronic control** of impact forces and immediate obstacle detection, ensuring the operator stops or reverses motion (if configured), as well as adjustment of opening and closing speeds.

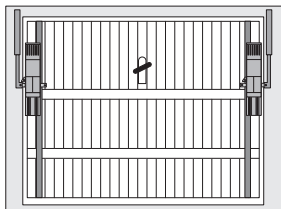


Example of installation

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



with 1 gearmotor

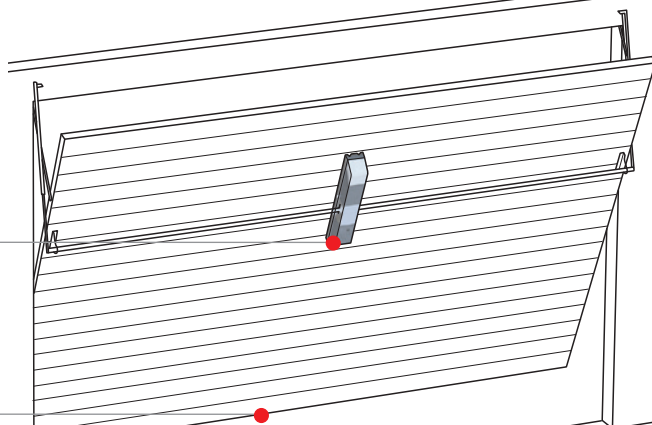


with 2 gearmotors

flashing light

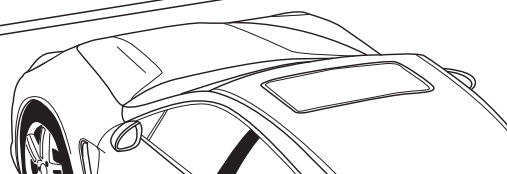


automation



sensitive edge

remote control



TECHNICAL SPECIFICATIONS

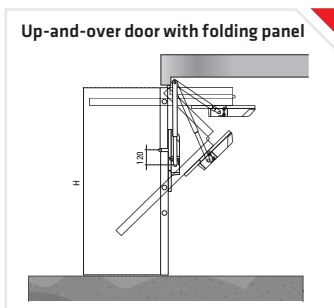
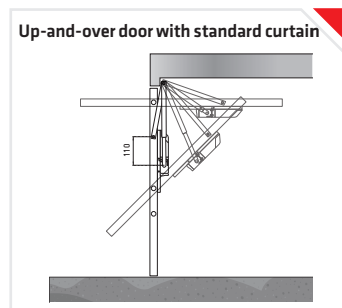
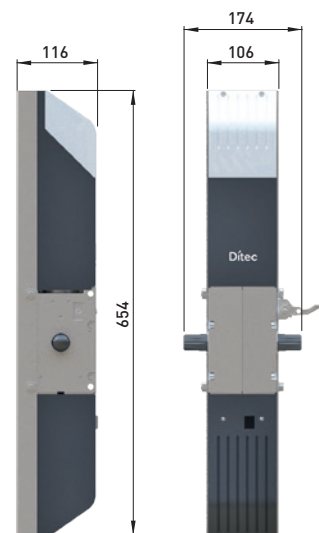
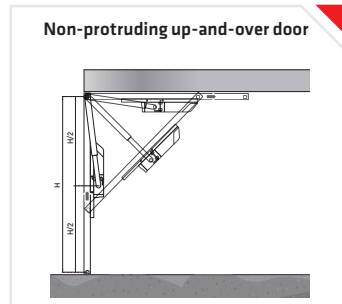
DESCRIPTION	BOX 3BH
Electromechanical actuator	for up-and-over doors with counterweights
Stroke control	virtual encoder + cam limit switch
Maximum capacity	7 m ² (1 motor) 12 m ² (2 motors in parallel)
Service class	frequent
Intermittent operation	S2 = 40 min S3 = 60% (T = 25°C)
Cycles / hour*	49 (T = 25°C)
Continuous cycles**	50 (T = 25°C)
Power supply	100-120 Vca / 200-240 Vca (by switch) - 50/60 Hz
Motor power supply	24 Vdc
Power input	8 A
Torque	265 Nm (single motor) 325 Nm (double motor)
Opening time	12÷50 s
Release system for manual opening	lever / key
Operating temperature	-20°C ÷ +55°C
Protection rating	IP 40
Product dimensions (mm)	654x108x116
Weight (kg)	11,4
Control panel	LCU55 (built-in)

* Approximate cycles considering a time for opening (22 sec), closing (22 sec), and pause times of 15 sec after opening and after closing. Complete cycle time of 74 sec

** Approximate cycles considering the time required for opening (22 sec), closing (22 sec) and pause times of 1 sec after opening and after closing. Complete cycle time of 46 sec

MAIN FUNCTIONS OF THE SYSTEM

GENERAL DATA	
Control panel	LCU55 built-in
Radio module	RCB100E (433.92 - 868.35 Mhz selectable)
Bluetooth®	built-in
Accessory power supply	24 Vdc / 0,5 A
Predisposizione finecorsa	■
Risparmio energetico	< 0,8 W con display e Bluetooth® attivo
Temperatura di funzionamento	-20°C ÷ +55°C in condizioni standard (-35°C ÷ +55°C con NIO attivato)
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	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	■



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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	■ via SW FlashIT and USBPROG or via App

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

Emergency release	■ with BOXSBC
8.2 KΩ-resistance safety edge	■ with COPAV
Magnetic loop detector	■ with LAB9