

# Dítec

OPEN YOUR WORLD



INTELLIGENT



SAFE



VERSATILE

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

## Dítec **ION**

# Ditec ION

Ditec ION 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 is made up of **two motor size, one for 400 kg and one for 600 kg wing**, both featuring on-board multi-function control panel.



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



steel **support plate**

accessible **terminals** for easy installation

**power supply terminal** protected by fuse

**rubber protective cover** prevents entry of dust and insects

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

steel reinforcement **plates**

**digital control panel** protected by removable transparent plastic

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

**Release microswitch** for greater safety when the automation is released

**aluminium die-casting** to ensure greater sturdiness

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

**steel plate** complete with anchoring clamps which securely fasten to the ground



**transmitter**

## FULL COMPLIANCE WITH EU DIRECTIVES AND STANDARDS

- **2014/30/EU - EMC** - Electromagnetic Compatibility Directive
- **2014/53/EU - RED** - Radio Equipment Directive
- **2006/42/CE** - Machinery Directive - (Annex II-B; Annex II-A; Annex I-Chapter 1)
- **Harmonised EU Standards:** EN ISO 13849-1 and EN ISO 13849-2; EN 60335-1; EN61000-6-3; EN61000-6-2; ETSI EN 300 220-1; ETSI EN 300 220-2; ETSI EN 301 489-1; ETSI EN 301 489-3
- **Other standards / technical specifications applied:** EN12445; EN62233; EN55014-1



# Ditec ION

## a versatile product

### SELF-LEARNING PROCEDURE, guided menu, predefined configurations!

- **Rapid self-learning procedure**, which automatically records all stopping positions in two operations, self-adjusting to the most diverse installation contexts
- **Guided menu (WZ)** for fast and simplified configuration of the automation at the first start-up stage
- **Steel plate** (optional) to avoid building work in the case of replacement of existing Ditec or competitor automation
- **Single-block base** with pre-fractures for replacement of Cross 3E
- **Three predefined configurations** for residential and condominium use. But that's not all: **removable storage** allows operating settings to be saved and copied to another operating device
- In the event of disturbance/interference, **433.92 MHz** and **868.35 MHz** frequencies are available
- Available in **230 V AC 50-60 Hz** and **120 V AC 50-60 Hz**

### THE NEW DIGITAL CONTROL PANEL helps you out

- **Possibility to comply with operating impact** values without having to fit active sensitive edges
- **Compliant with EU standard 13849** with or without installation of active edges
- Ready for **magnetic limit switches** for a more accurate adjustment of stopping points during 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
- **Energy saving mode** which limits stand-by consumption by disconnecting accessories



## ION6

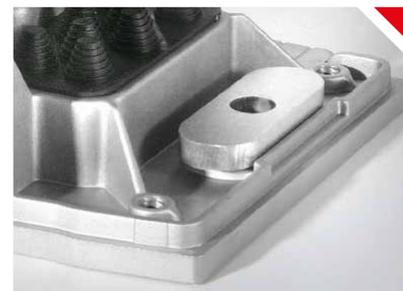
### IMPROVED PERFORMANCES FOR WINGS UP TO 600 KG!



STEEL PINION



HIGH-PERFORMANCE  
TRANSFORMER



LARGER PLATES  
FOR MORE STURDINESS

# Ditec ION

## top of range functions



### AES-128 and PROTECTED mode

Ditec ION is ready to operate with the AES-128 radio transmission encryption protocol: you will be able to use the transmitters of the ZEN series in AES-128-bit Encrypted mode making the use of cloned transmitters impossible. The control panel is capable of decrypting remote controls programmed with an installation code customisable as you like (PROTECTED Mode using configuration via ZEN Pad).



### OPTIMISED MANAGEMENT of battery recharging

Thanks to the new management of recharging, the battery controller (optional) makes it possible to prolong the battery life and recharge duration in the event of an emergency. It is also possible to install systems powered exclusively by solar energy, in stand-alone mode.



### CONVENIENCE FIRST remote releasing and resetting

In the event of an emergency it is possible to release your ION automation remotely. And that's not all! You can lock again the automation without having to act manually on the motor.



### SIMPLE AND SECURE ACCESS via smartphone, locally you can manage remotely

With Entrematic Smart Connect, you can manage the automation through smartphone, tablet and pc, locally or remotely, via Wi-Fi or Ethernet. Open, close and request the status of your access, configure new users and integrate HD real-time video.

With Secure Virtual Access (SVA), entrances can be managed via Bluetooth, enabling credentials that give users permanent or occasional access, according to configurable time bands which can be modified at any time.

## AUTOMATION designed for you!

- **Total operation counter** keeps track of the total number of cycles carried out by the operating device
- **Partial operation counter** (can be reset) to set a programmed maintenance threshold at which the flashing light will tell your customer that it's time to carry out servicing!
- Possibility of locking the configurations with an access **password** to permit configuration changes only by qualified personnel

## MAINTENANCE has never been quicker

- **Integrated diagnostics** with counters and history for the most recent alarms, visible on the panel display
- In the case of extraordinary maintenance, you no longer have to remove all the automation! With Ditec ION **it is possible to remove the control panel/transformer block unscrewing just two screws** and accessing the mechanical parts directly



## SPECIFIC ACCESSORIES



- **Energy controllers** to manage batteries and solar energy production, complete with assembly brackets



- **Chain traction kit**



- **Magnetic limit switches** optional for ION4 and ION6



- **Remote manual release** optional for ION4 and ION6



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



- **Plate**
  - steel base perfect to simplify for retrofit installations



Discover the entire range of Ditec branded products at [www.ditecautomations.com](http://www.ditecautomations.com)



## INTELLIGENT

Ditec ION includes a **rapid self-learning procedure**, which automatically records all stopping positions in two operations, self-adjusting to the most diverse installation contexts.



## 24V VIRTUAL ENCODER

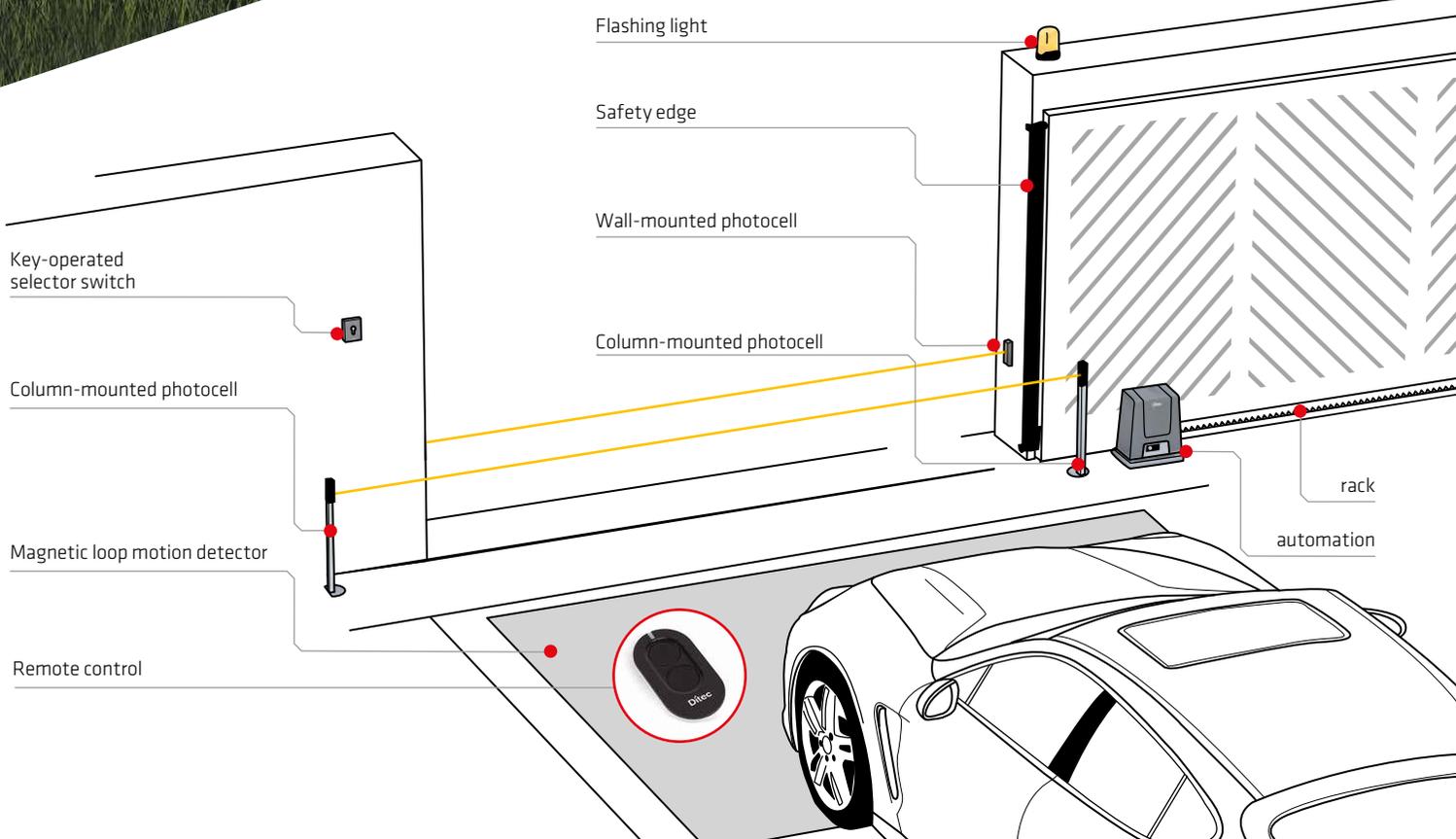
For **constant electronic monitoring** of impact forces and immediate obstacle detection ensuring that the electromechanical actuator is stopped, or the motion is inverted (if configured). Optional **magnetic limit switches**. Additionally, in the event of a blackout, the electronic control panel intervenes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

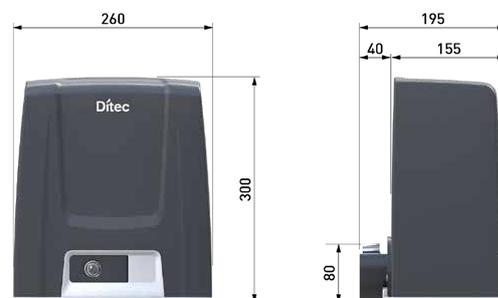


## VERSATILE

From the control panel, **it is possible to precisely manage position and speed** at all times, allowing adjustment for acceleration, deceleration, start time, slowdown distance and approach speed during opening and closing.

# Example of installation





## TECHNICAL SPECIFICATIONS

DESCRIPTION	ION 4 - ION 4J	ION 6 - ION 6J
Max. leaf weight	400 kg	600 kg
Stroke control	virtual encoder	virtual encoder
Maximum opening width	12 m	12 m
Service class	frequent use tested up to 150,000 cycles	frequent use tested up to 150,000 cycles
Power supply	230 V AC - 50/60 Hz 120 V AC - 50/60 Hz (J version)	230 V AC - 50/60 Hz 120 V AC - 50/60 Hz (J version)
Power absorption	24 V DC	24 V DC
Max current absorption	0.45 A 0.9 A (J version)	0.6 A 1.2 A (J version)
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
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	LCU48	LCU48

## MAIN FUNCTIONS OF THE SYSTEM

GENERAL DATA		PROGRAMMABLE FUNCTIONS	
Control panel	built-in with radio incorporated	Stroke control	virtual encoder
Radio frequency	433.92 MHz standard, 868.35 MHz with ZENPRS or with ZENPR2	Configuration of programmable functions	display and navigation keys
433.92 MHz --> 868.35 MHz interchangeable receiver module	■	Force adjustment	Electronic
Mains power supply	230 V AC - 50/60 Hz	Speed setting	■
Accessories power supply	24 V DC / 0.3A	Soft Start / Soft Stop	adjustable
Limit switch provision	■	Braking/Slowing down	adjustable
Energy saving	reduced consumption in standby	Stop approach	adjustable
Operating temperature	-20°C +55°C in standard conditions -35°C +55°C with NIO enabled	Adjustable automatic closing time	■
		Integrated datalogging (counters and recent alarm history)	■
		FW update	using Amigo and USBPROG
INPUTS		SAFETY AND PROTECTION FUNCTIONS	
Open control	shared with inching control, which can be selected from the display	Emergency stop	■
Partial opening control	■	Safe closing (inversion)	■
Close control	shared with emergency stop, which can be selected from the display	Safety Test Facility (for automatic safety devices)	■
Stop control	via Radio or shared with partial opening control, which can be selected from the display	ODS - Obstruction Detection System (causes the gate to stop or reverses movement when an obstacle is detected)	■
Inching control	■	NIO - Antifreeze system	■
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	OPTIONAL ACCESSORIES	
		Batteries	■ with IONSBU and IONKSBU
		Ready for integrated batteries	■
		Stand-alone solar-power connection	■ with IONSBU
		8.2 KΩ-resistance safety edge	■ with GOPAV or SOF accessory
		Magnetic loop detector	■ with LAB9
OUTPUT			
Flashing light	24 V DC		
Electrically operated lock	■ shared with flashing light		
Gate-open warning light (ON/OFF)	■ shared with flashing light		
Gate-open warning light with proportional blink rate	■ shared with flashing light		
Courtesy light	■ shared with flashing light		



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