



INTELLIGENT



SAFE

**24V**  
VIRTUAL  
ENCODER

VERSATILE



## **Ditec ION**

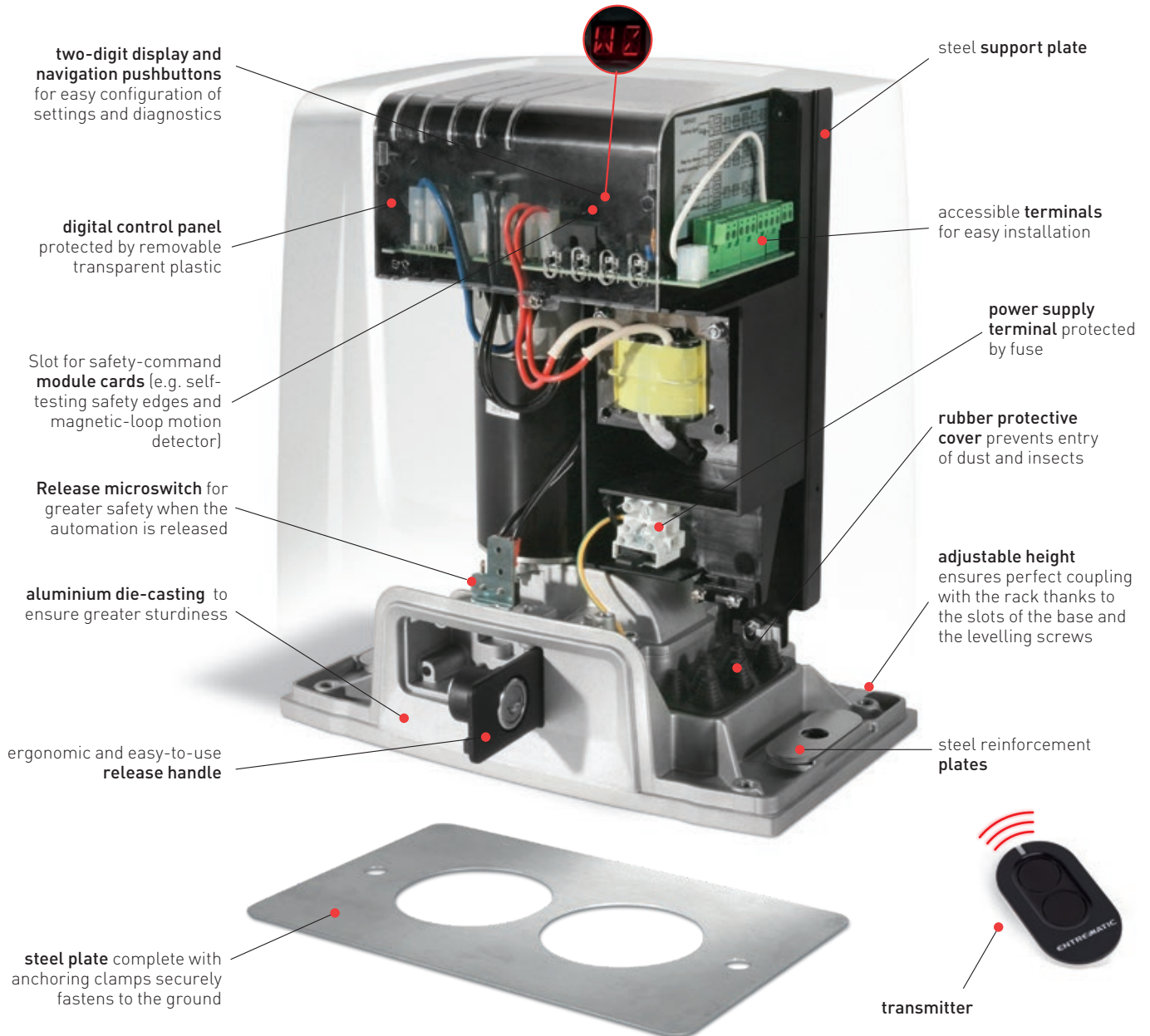
EN

Automation for sliding gates up to 600 kg

# Ditec ION

Ditec ION is the new 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 motors per 400 Kg and 600 Kg wing, and integrates the multifunction control panel in the operating device.



## OUR EXPERTISE AT YOUR SERVICE

A complete range. A dedicated team of specialists. Excellence in technology and design. Passionate to be different. Entrematic is a complete business partner in entrance automation, aggregating specialist expertise and well-known brands. Ditec has been a leading brand for more than 40 years, offering a complete range of automation systems for gates, automatic pedestrian doors and rapid doors.

**Normstahl**  
ENTRE/MATIC

**DYNACO**  
ENTRE/MATIC

**NERGECO**  
ENTRE/MATIC

**Ditec**  
ENTRE/MATIC

**em**  
ENTRE/MATIC

**Amarr**  
ENTRE/MATIC

**KELLEY**  
ENTRE/MATIC

**SERCO**  
ENTRE/MATIC

# 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 **868.65 MHz** frequencies are available

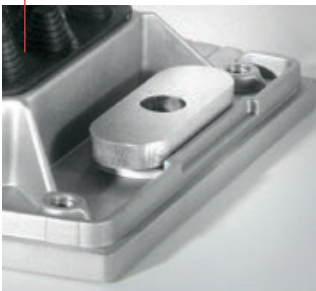
## THE NEW DIGITAL CONTROL PANEL helps you out

- **possibility to comply with operating impact** values without having to fit active sensitive edges
- **compliant with 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 overtemperature
- **energy saving mode** to limit consumption in standby thanks to disconnection of the accessories



## ION6: SAME ADVANTAGES AS ION4 FOR 600 KG WINGS!

Larger plates for  
more sturdiness



Steel pinion



High-performance  
transformer



## FULL COMPLIANCE WITH EU DIRECTIVES AND STANDARDS



- **2014/30/EU - EMCD** - Electromagnetic Compatibility Directive
- **2014/53/EU - RED** - Radio Equipment Directive
- **2006/42/CE** - Machines 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 | top of range functions



## AES-128 and PROTECTED mode

Ditec ION is already ready to receive the new AES-128 radio transmission encryption protocol: you will therefore be able to use the transmitters of the ZEN serie in AES-128-bit Encrypted mode making the use of cloned transmitters impossible.

But that's not all! 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 new 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.



## SIMPLE AND SECURE ACCESS via smartphone and access credentials

It is now possible to easily open the gate with a smartphone, via Bluetooth, activating access credentials for permanent or temporary access for other users, based on time periods that can be configured and adjusted at any time (with the optional accessory).



## CONVENIENCE FIRST remote releasing and resetting

In the event of an emergency it is possible to release the automation remotely.

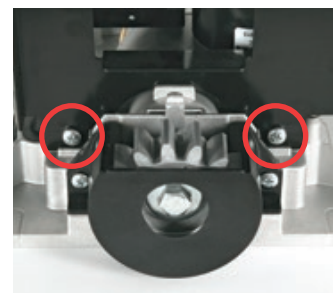
And that's not all! You can lock again the automation without having to act on the motor manually.

## 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 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, from today 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 Ditec ION ACCESSORIES ARE EASY TO CHOOSE

### Controller

to manage batteries and solar energy production, complete with assembly brackets



### Magnetic limit switches

optional for ION4 and ION6



### Remote manual release

optional for ION4 and ION6



### Rack

- in nylon, complete with screws (integrated supports) - 28x20x1000 mm
- in steel, complete with screws and supports - 30x12x1000 mm



### Plate

- in steel for retrofit installations







## 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.

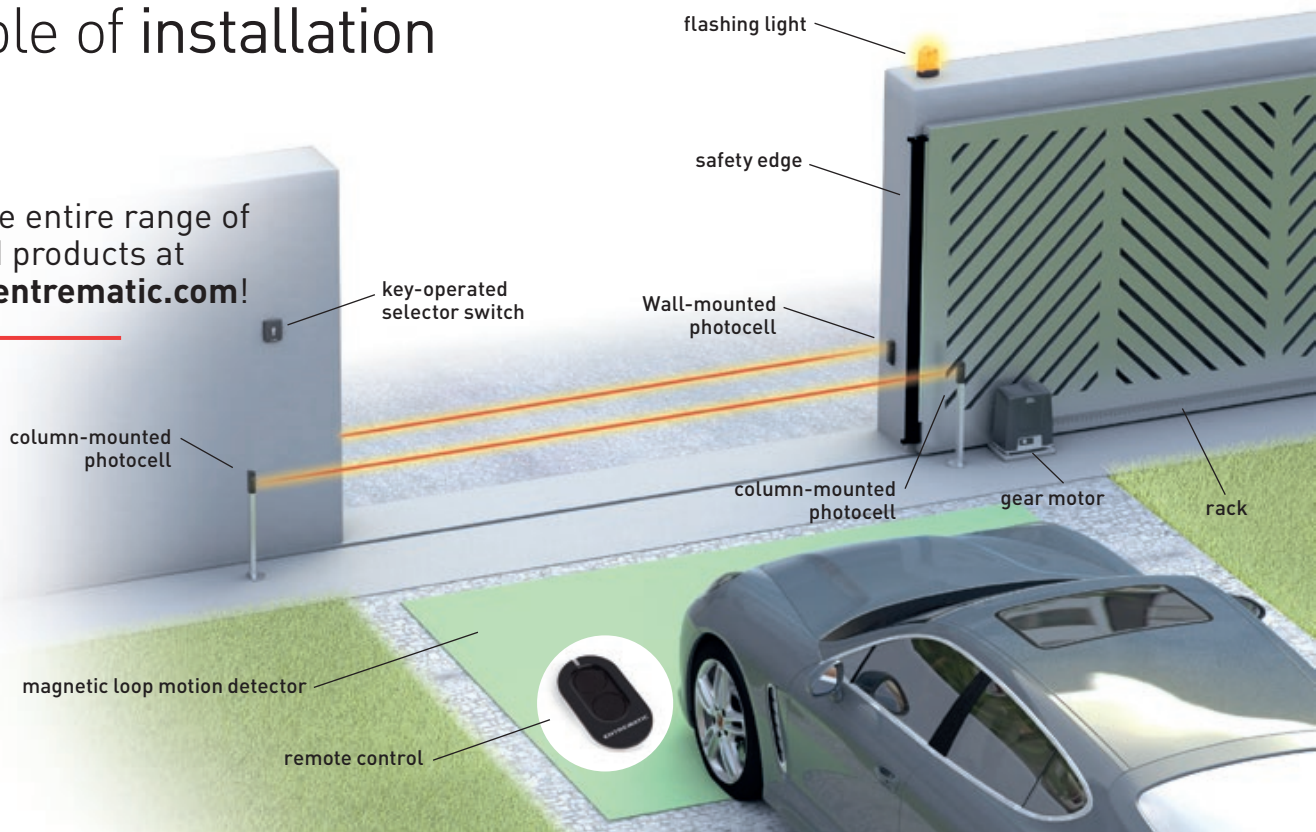


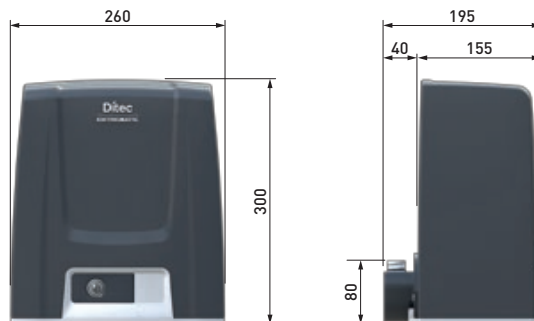
## VERSATILE

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

Discover the entire range of Ditec brand products at [www.ditecentrematic.com](http://www.ditecentrematic.com)!





## Technical specifications

Description	ION 4	ION 6
Max. leaf weight	400 kg	600 kg
Stroke control	virtual encoder	virtual encoder
Maximum opening width	12 m	12 m
Service class	frequent tested up to 150,000 cycles	frequent tested up to 150,000 cycles
Power supply	230 V AC - 50-60 Hz	230 V AC - 50-60 Hz
Power absorption	24 V DC	24 V DC
Power input	0.45 A	0.6 A
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)	
Protection rating	IP 44	IP 44
Control panel	LCU48	LCU48

## Main functions of the system

TECHNICAL SPECIFICATIONS		PROGRAMMABLE FUNCTIONS	
Control panel	built-in with radio incorporated	Stroke control	virtual encoder
Radio frequency	433.92 MHz standard, 868.65 MHz with ZENPRS or with ZENPR2	Configuration of programmable functions	display and navigation keys
433.92 MHz --> 868.65 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	■
<b>INPUTS</b>		Integrated datalogging (counters and recent alarm history)	■
Open control	shared with inching control, which can be selected from the display	FW update	■ using Amigo
Partial opening control	■	<b>SAFETY and PROTECTION FUNCTIONS</b>	
Close control	shared with emergency stop, which can be selected from the display	Emergency stop	■
Stop control	via Radio or shared with partial opening control, which can be selected from the display	Safe closing (inversion)	■
Inching control	■	Safety Test Facility (for automatic safety devices)	■
Hold-to-run command	■	ODS - Obstruction Detection System (causes the gate to stop or reverses movement when an obstacle is detected)	■
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	NIO - Antifreeze system	■
<b>OUTPUT</b>		<b>OPTIONAL ACCESSORIES</b>	
Flashing light	24 V DC	Batteries	■ with IONSBU
Electrically operated lock	■ shared with flashing light	Ready for integrated batteries	■
Gate-open warning light (ON/OFF)	■ shared with flashing light	Stand-alone solar-power connection	■ with IONSBU
Gate-open warning light with proportional blink rate	■ shared with flashing light	8.2 KΩ-resistance safety edge	■ with GOPAV or SOF accessory
Courtesy light	■ shared with flashing light	Magnetic loop detector	■ with LAB9



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