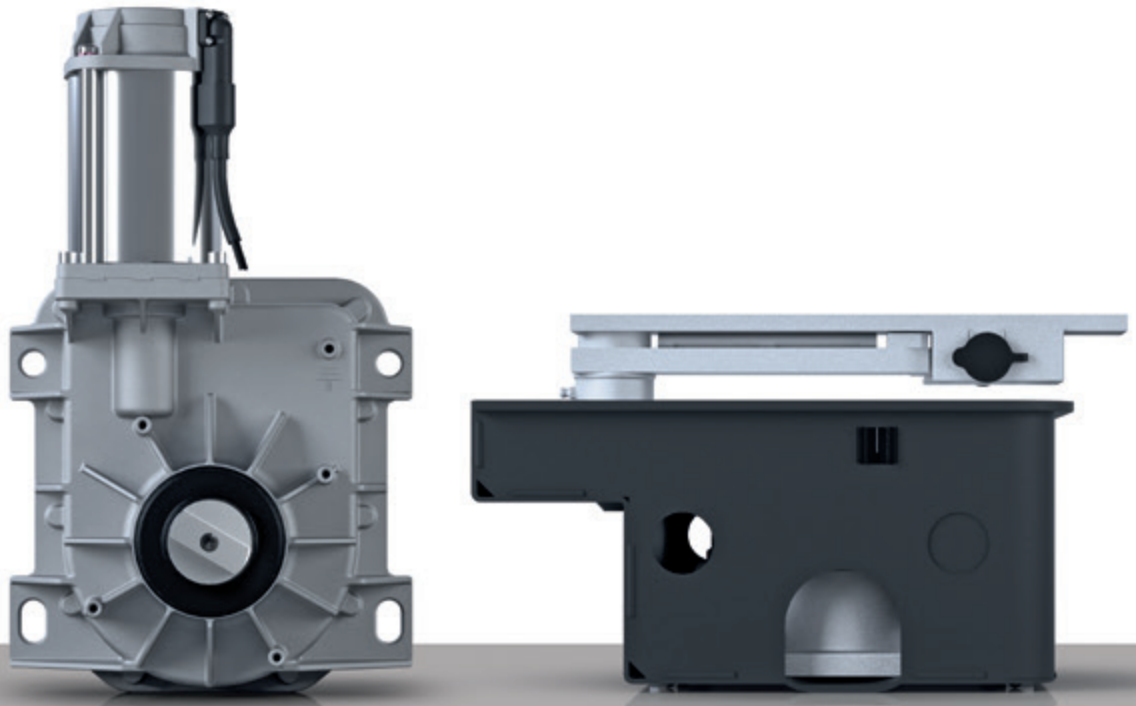
Ditec
OPEN YOUR WORLD



A COMPLETE RANGE

24 V VIRTUAL ENCODER
SAFE

RELIABLE AND STURDY

Underground automation system for swing gates with single wing up to **4 m**

Ditec **CUBIC**

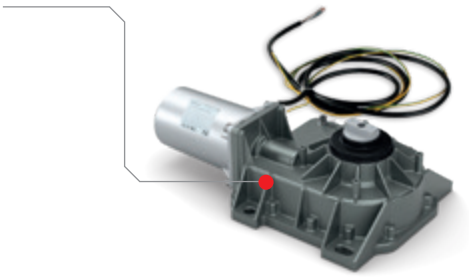
EN

Ditec **CUBIC**

Ditec CUBIC is the underground automation system for swing gates with wing up to 4 m and weight up to 800 kg. The automation system has no visible protrusions: it is ideal for prestigious gates and doors, buildings of high architectural or historical value and anywhere that needs to maintain the original style, beauty and elegance of the entrance. Simple and functional, this **underground system** consists of a foundation casing in steel with cataphoresis surface treatment or in stainless steel, housing the gear motor and mechanical levers that control the gate wing movement.

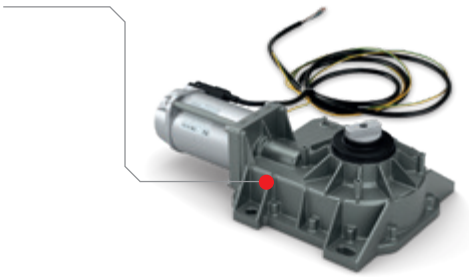
CUBIC6

230 Vac
for **wing up to 4 m**



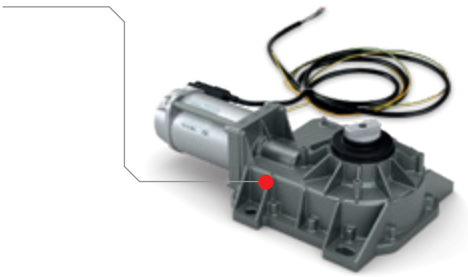
CUBIC6H

24 Vdc
for **wing up to 4 m**



CUBIC6HV

24 Vdc, **fast version**
for wing up to **2.5 m**



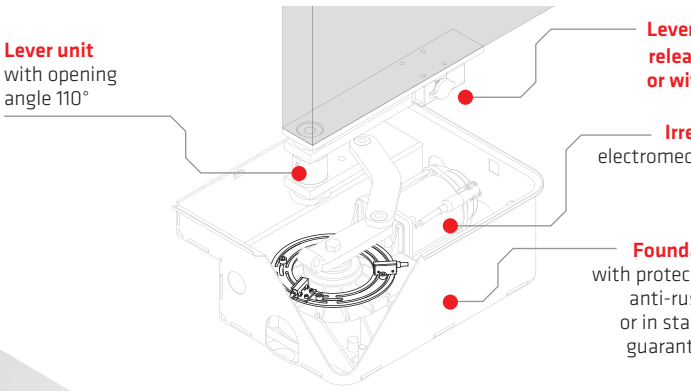
FOUNDATION CASING

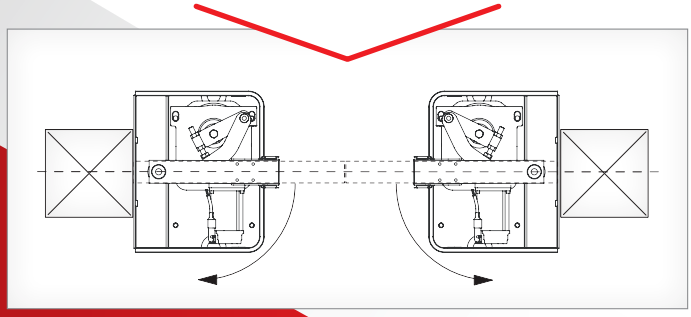
- Available in two sizes:
  small (342x422x168), large (390x502x168)
- With cataphoresis surface treatment or in stainless steel
- Compatible with standard, long or chain lever unit
  (chain only for small foundation casing)

LEVER UNIT

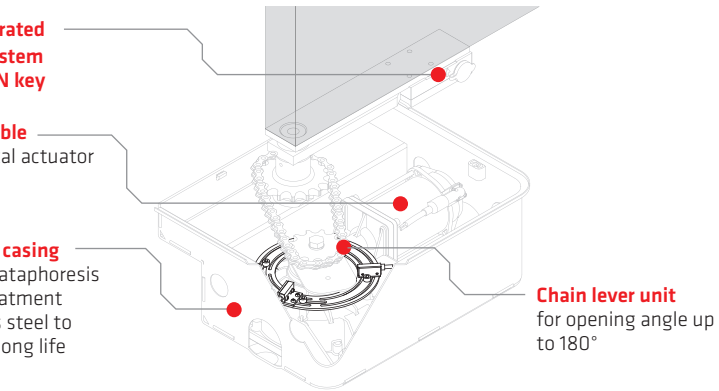
- The gear motor and levers are used to manage wings of different sizes and openings up to 110°.
  Opening up to 180° with the chain lever unit.

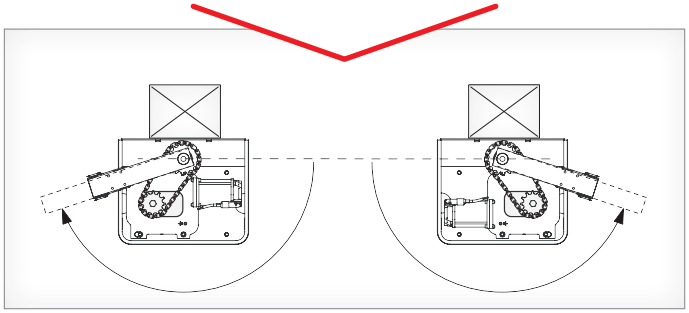
for openings up to 110°





for openings up to 180°





Ditec LCA70 and LCA80

new universal control panels for 230 Vac motors

- **menu with configuration wizard (Wizard WZ)** for configuring the control panel quickly and simply during initial start-up: just choose the operating logic, the number of gate wings, and whether or not to enable automatic closing and then save the remote control units, and you're ready to go!
- **pre-configured operating logic:** automatic operation with or without deceleration at end of travel, timer-controlled operation with or without deceleration at end of travel, and timer-controlled operation with force limitation
- more expert users can customise over **100 parameters**, using the easy-to-use menu, the display and the navigation buttons
- **Green Mode** for energy saving in standby mode
- **integrated diagnostics** with counters and recent alarms log, viewable on the display of the control panel

Ditec LCU40H

top performance for 24 Vdc motors

- **self-learning procedure** facilitated by the display and navigation buttons for configuring the automation in just a few steps
- **complete adjustment** of speed, acceleration and start-up
- **plastic protection** of the card
- **Green Mode** for energy saving in standby mode
- **diagnostics** with data-logging and data analysis software
- **the virtual encoder** ensures precise speed adjustment with the possibility to configure deceleration and start-ups, with no mechanical stress during opening and closing
- **in the event of a temporary black out**, the possibility to connect the batteries to the control panel ensures continuous service, allowing the system to carry out numerous operations while waiting for the mains power to be restored.

See the dedicated documentation for more information on control panels

Ditec CUBIC

...for fast pedestrian access

- The CUBIC6HV 24 Vdc automation is used to automate pedestrian gates
- Compatible with small foundation casing and levers (wing up to 2 m) or large foundation casings and levers (wing up to 2.5 m)
- Fast opening up to 90°
- Opening up to 110°

FULL COMPLIANCE WITH EU DIRECTIVES AND STANDARDS

- **2014/30/EU - EMCD** - Electromagnetic compatibility directive
- **2006/42/CE** - Machinery Directive - (Annex II-B; Annex II-A; Annex I-Chapter 1)

For more information, consult the conformity of the control panels with the standards and directives (ref. LCU40H, LCA70 and LCA80)

Ditec CUBIC

kits for every need

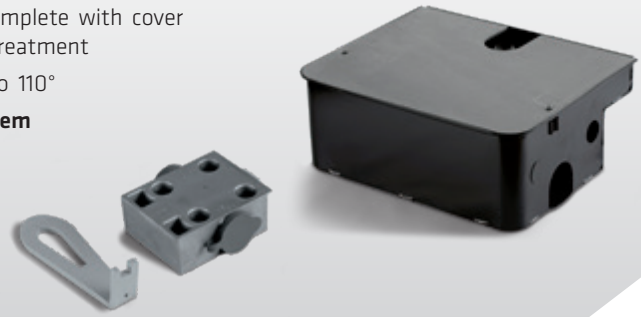
MOTOR AND ELECTRONICS KIT 230 Vac or 24 Vdc

Discover the advanced functions available when using Ditec CUBIC automation systems and control panels together with Ditec safety and control accessories:

- **LIN2 compact photocells** with adjustable beam direction
- **Ditec ZEN remote-control units** with rolling-code or AES-128 encrypted protocol, with literally billions of billions of possible combinations to make cloning impossible
- in the complete kit, **Ditec FLM multi-voltage flashing lamp unit** with auto-flashing function (in 230 Vac kits) or **Ditec FL24 24 Vdc flashing light** (in 24 Vdc kits).
  White, blue, green, yellow and orange signal lights (only in complete kits)

KIT FOR WING UP TO 3.5 M

- **small foundation casing** complete with cover with cataphoresis surface treatment
- **lever unit** for opening up to 110°
- **lever-operated release system**



EASY TO CHOOSE, THE SPECIFIC DITEC CUBIC ACCESSORIES

Foundation casing
- small with recessed cover
- small with stainless steel recessed cover
- small, stainless steel with stainless steel recessed cover
- large with recessed cover

Lever unit
- 110° opening, for small casing
- 110° opening, for large casing
- 180° chain opening, for small casings

Release activated from both sides
- lever-operated
- with DIN key

Magnetic
limit switches

Motor	Foundation casing	Lever unit	Max. opening	Wing up to
CUBIC6 - CUBIC 6H	Small	with standard lever	110°	3.5 m
		with chain	180°	2.3 m
	Large	lever-operated, long	110°	4 m
CUBIC6HV	Small	with standard lever	110°	2 m
	Large	lever-operated, long	110°	2.5 m

24 V VIRTUAL ENCODER

SAFE

The 24 Vdc virtual encoder models ensure constant adjustment of the impact forces and immediate obstacle detection.
Mechanical limit switch supplied as standard, or optional magnetic limit switch.

RELIABLE AND STURDY

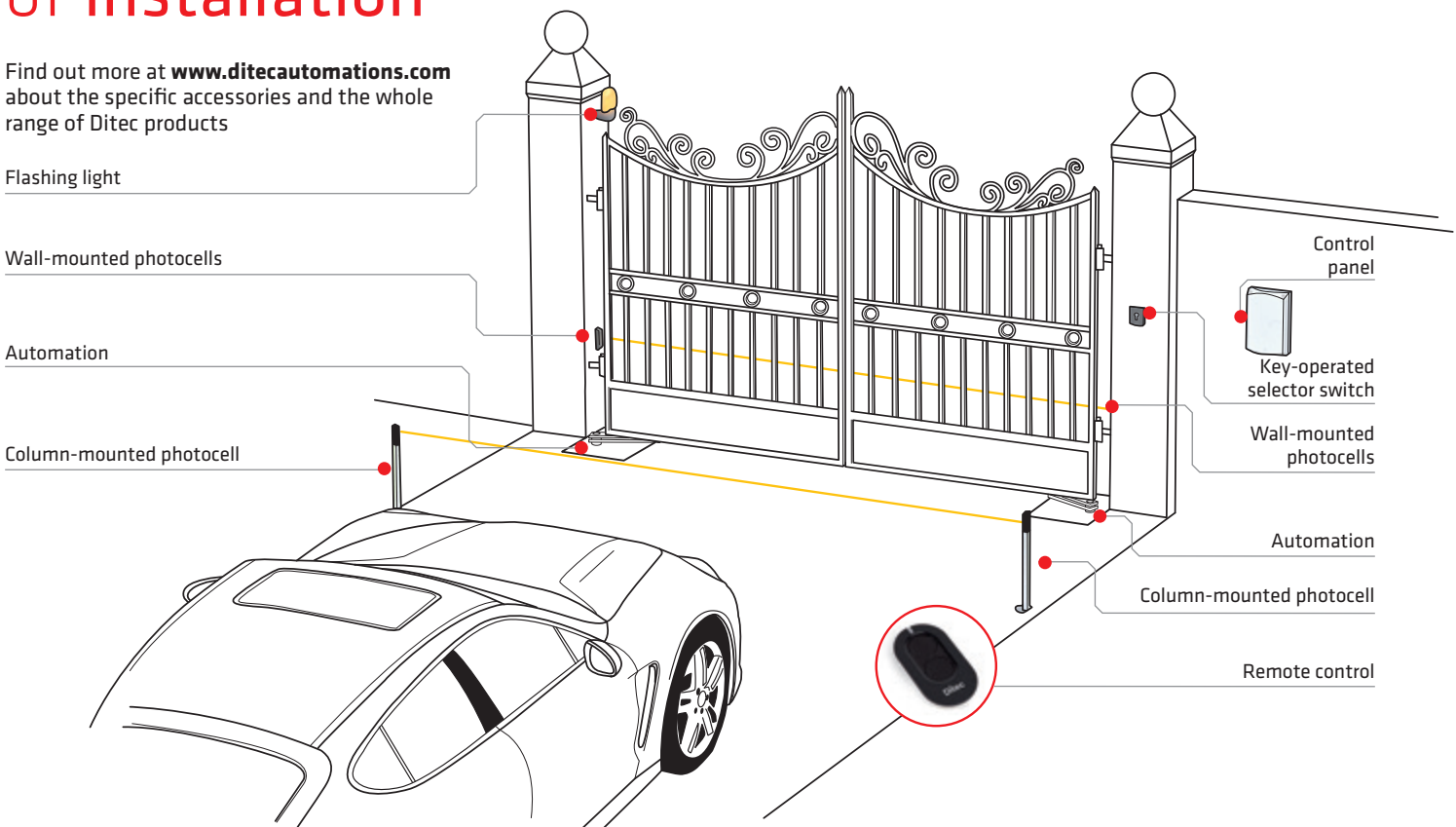
Foundation casing with protective cataphoresis surface treatment or in stainless steel.

A COMPLETE RANGE

One 230 Vac and two 24 Vdc versions available, including a fast model with 6-second opening (with standard lever for accesses up to 2 m), with 8-second opening to 90° (with long lever for accesses up to 2.5 m).

Example of installation

Find out more at **www.ditecautomations.com** about the specific accessories and the whole range of Ditec products



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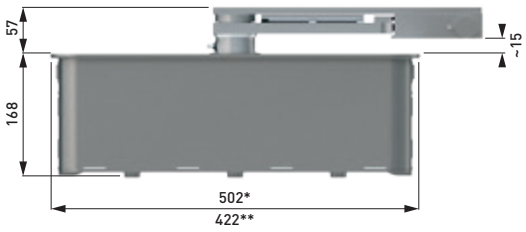

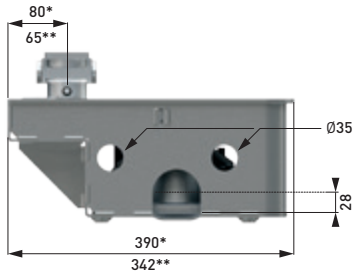

*Ditec CUBIC6CG **Ditec CUBIC6C - CUBIC6CM - CUBIC6CY

TECHNICAL SPECIFICATIONS

DESCRIPTION	CUBIC 6	CUBIC 6H	CUBIC 6HV
Electromechanical actuator	irreversible for wing up to 4 m	irreversible for wing up to 4 m	irreversible for wing up to 2.5 m
Stroke control	magnetic limit switch (optional)	magnetic limit switch (optional)	magnetic limit switch (optional)
Maximum capacity	800 kg x 2 m 350 kg x 4 m	800 kg x 2 m 350 kg x 4 m	350 kg x 1 m 200 kg x 2.5 m
Service index	3 - frequent	4 - intensive	4 - intensive
Intermittent operation	S2 = 15 min S3 = 25%	S2 = 30 min S3 = 50%	S2 = 30 min S3 = 50%
Power supply	230 Vac - 50 Hz	24 Vdc	24 Vdc
Power absorption	1.5 A	12 A	12 A
Torque	340 Nm	340 Nm	220 Nm
Opening time	18 s/90°	12÷45 s/90° with CUBIC6L 15÷55 s/90° with CUBIC6LG	6÷25 s/90° with CUBIC6L 8÷30 s/90° with CUBIC6LG
Actuator maximum opening	110° or 180°	110° or 180°	110°
Release system for manual opening	key-operated	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)	-20°C ÷ +55°C (-35°C ÷ +55°C with NIO enabled)
Protection rating	IP 67	IP 67	IP 67
Control panel	LCA70 LCA80	LCU40H	LCU40H

MAIN FUNCTIONS OF THE SYSTEM

	CUBIC 6	CUBIC 6	CUBIC 6H-6HV
Control panel	LCA70 for 1 or 2 230 Vac motors with built-in radio	LCA80 for 1 or 2 230 Vac motors	LCU40H for 1 or 2 24 Vdc motors with built-in radio
Radio frequency	433,92 MHz as standard 868,35 MHz with ZENPRS or BIXPR2	433,92 MHz with ZENRS or BIXR2 868,35 MHz with ZENPRS or BIXPR2	433,92 MHz as standard 868,35 MHz with ZENPRS or BIXPR2
Interchangeable receiver module 433 MHz/ 868 MHz	■	■	■
Mains power supply	230 Vac - 50/60 Hz	230 Vac - 50/60 Hz	230 Vac - 50/60 Hz
Motor power supply	230 Vac; 2 x 2A; 1 x 4A	230 Vac; 2 x 2A; 1 x 4A	24 Vdc - 2 x 12 A
Accessories power supply	24 Vdc + 24 Vac - 0.3 A	24 Vdc + 24 Vac - 0.5 A	24 Vdc - 0.5 A
Stroke control	end stop detection and time calculation	end stop detection and time calculation	virtual encoder
Limit switch provision		■	■
Energy saving		energy saving on standby (limitation of current absorbed by accessories)	<1 W on standby
Operating temperature	-20°C ÷ +55°C in standard conditions (-35°C ÷ +55°C with NIO enabled)		
Control panel protection level	IP55	IP55	IP55
Control panel dimensions (mm)	187x261x105	187x261x105	238x357x120
Open control	shared with step-by-step control, selected via display	■	■
Partial opening control	■	■	■
Close control	shared with emergency stop, which can be selected from the display	■	■
Stop command	via radio or shared with partial opening control, which can be selected from the display	■	■
Step-by-step control	■	■	■
Hold-to-run control	■	■	■
Automatic closing contact management	shared with partial opening control, selected via display	■	■
Flashing light	230 Vac max 25 W	230 Vac max 25 W	24 Vdc
Electromechanical locking device	12 Vac 15 W	12 Vac 15 W	12 Vdc 15 W
Number of configurable 24 Vdc outputs	1	2	1
gate open warning light (ON/OFF)	■	■	■
- gate-open warning light with proportional flashing	■	■	■
- courtesy light	■	■	yes, shared with electromechanical locking device or flashing light
- 24 Vdc LED flashing light	■	■	■
Configuration of programmable functions	display and navigation keys	display and navigation keys	display and navigation keys
Force adjustment	■ (electronic)	■ (electronic)	■ (electronic)
Speed			adjustable
Approach speed	adjustable	adjustable	
Acceleration/deceleration ramp (Soft Start / Soft Stop)			adjustable
Thrust on obstructions	adjustable	adjustable	adjustable
Braking/deceleration	adjustable	adjustable	adjustable
End stop approach distance	adjustable	adjustable	adjustable
Operation time	adjustable	adjustable	adjustable
Automatic closing time	adjustable	adjustable	adjustable
Compatibility with hydraulic motors	■	■	
High traffic management	■	■	
Integrated datalogging (counters and recent alarm history)	■ Viewable on display	■ Viewable on display	■ can be viewed on the display and on a PC with Amigo SW
Extended datalogging with micro SD (in-depth records for every event)			■ can be viewed on a PC with Amigo SW
FW update	■ With Amigo and USBPROG software	■ With Amigo and USBPROG software	■ using micro SD or using Amigo SW and USBPROG
Safety stop (emergency stop)	■	■	■
Safe closing (reverse)	■	■	■
Safety test function (for automatic safety devices)	■	■	■
ODS - Obstacle Detection System	■	■	■
NIO - Antifreeze system	■	■	■
Battery-operated			■ with SBU
Provision for control-panel integrated batteries			■
Stand-alone solar-powered installation			■ with SBU*
Hybrid solar-powered installation			■ with SBU
Safety edge with 8.2kΩ resistance	■ with accessory	■ during opening and closing (terminals already integrated in the control panel)	■ with accessory GOPAV or SOF
Magnetic loop detector	■ with LAB9	■ with LAB9	■ with LAB9

With SBU it is possible to use photovoltaic panels up to max 20 W to recharge the batteries. The battery recharging time and the number of possible operations depend on the irradiation conditions.

ICIM UNI EN ISO 9001:2015 SISTEMA DI GESTIONE CERTIFICATO
Cert. No. 0957/6

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