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VERSATILE



INNOVATIVE

Control panels  
for 1 or 2  
**230 Vac** motors  
for swing gates

Ditec **LCA**

# Ditec LCA

Ditec LCA is the family of multifunction control panels for one or two 230 Vac motors for swing gates.

Two versions of the control panel are available:

**LCA70** is a control panel complete with 433.92 MHz receiver module, suitable for the needs of the majority of installations.

**LCA80** is a premium control panel with exclusive features and advanced configuration options: with a larger number of inputs and outputs, this unit caters comprehensively for any possible application. The receiver module is optional, to let the customer choose between two different frequencies (433.92 MHz or 868.35 MHz).

The integrated display and menu with configuration wizard, standard on both panels, allows the installer to easily configure the electronic board in just few steps.

## Ditec LCA70



**bright two digit display and navigation buttons**

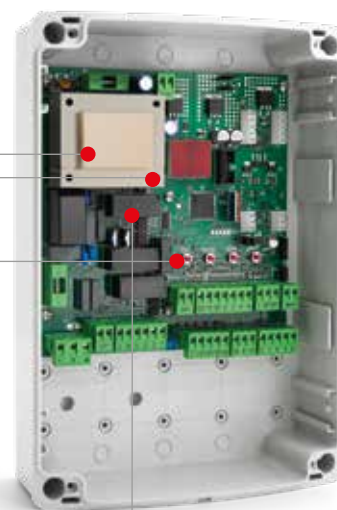
to facilitate parameter configuration and diagnostics

sockets for **plug-in** control and safety boards (magnetic loop detector and badge decoders for RFID transponder technology)

interchangeable plug-in **radio receiver module** available in two frequencies (433.92 MHz or 868.35 MHz)

**removable memory module** to store parameter values (with possibility to simply copy them on other control panels) and to memorize up to 200 remote controls

## Ditec LCA80



### A VERSATILE control panel

- **menu with configuration wizard (Wizard WZ)** to configure the control panel quickly and simply during initial setup: just choose the operating logic, the number of gate wings and whether or not to enable automatic closing, memorize the remote controls, and you're ready to go!
- **pre-configured operating logics:** automatic operation with or without deceleration at end of travel, timer-controlled operation with or without deceleration at end of travel, and timercontrolled operation with force limitation
- in case of specific needs, installers can adjust **more than 100 parameters**, using the easy-to-use menu, the display and the navigation buttons
- **password-protected** access to configurations prevents modification by unauthorised persons
- **unused inputs may be disabled** to prevent subsequent installation of unauthorised accessories
- **a choice of two frequencies** (433.92 MHz and 868.35 MHz), to avoid disturbance or interference
- **temperature sensor**, which prevents the motors from icing in case of very cold weather, ice or snow (**NIO - No Ice Option - function**)



### USER-FRIENDLY advanced functions



**GREEN mode:** in the majority of today's residential applications, the control panel remains in standby for around 90% of the time, and only actively controls opening and closing movements for 10% of the time. Ditec GREEN Mode (available on LCA80), reduces the electric power consumption of the control panel when in standby mode, offering immediate savings in electricity costs



**high traffic function:** this function offers benefits during peak traffic times in condominium applications by reducing wait times for users while limiting the possibility of motor overheating. When enabled, the function monitors the intervals between consecutive open requests and temporarily extends the automatic close delay time in case of consecutive requests within short intervals

- compatible with **Smart Connect** the new system for **managing gates locally or remotely from a mobile app or PC**





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## Control panels for 230 Vac electromechanical or hydraulic motors

Ditec LCA control panels are the perfect choice to upgrade and modernise any swing gate: whether with external, articulated arm or in-ground gate openers. The innovative proprietary continuous position monitoring and control system (Ditec Virtual Encoder) even lets you control motors without encoders with the utmost precision and safety.

LCA control panels include the following functions and features:

- **Time management functions:** individual motor operating times, motor delay times, deceleration at end of opening and closing travel, obstacle detection, increased starting torque, acceleration at start of opening and closing movements, electric lock activation, movement reversal and closing force against mechanical stops
- **Management functions for** approach speed during opening and closing movements, thrust force against obstacles during normal operation and final approach, and force settings
- **Adjustable obstacle thrust force sensitivity** for both normal operation and for final approach during opening and closing movements
- **Automatic ramp adjustment:** in low temperature conditions, Ditec LCA automatically increases the initial torque to the highest value whilst reducing the acceleration time to the lowest possible value

- Settings for **pressure hold function for hydraulic actuators**
- Safety device test
- 2 dedicated inputs (for open and closed positions) for **self-testing resistive active safety edges (8.2kΩ)** (on LCA80)
- **2 inputs for very low voltage logical limit switches** for open and closed positions for each motor (on LCA80 only). Stop limit switches may also be managed, if connected in series with motor phase
- **Slot for plug-in Ditec accessories**
- **Separate power outputs** for 24 Vac and 24 Vdc accessories
- **1 configurable 24 Vdc output on LCA70 (2 outputs on LCA80)** for accessories such as a courtesy light, flashing light and gate open indicator lamp, and active output with state dependent on state of gate
- **Configurable 12 Vac output for electric lock**, and dedicated output for 230 Vac flashing light



## DISCOVER

the new electronic retrofit kits for 230 Vac installations

### Ditec LCA a control panel for Professionals

- **Total open/close cycle counter**, to keep track of the total number of cycles performed by the motors
- **Resettable partial open/close cycle counter**, for setting scheduled maintenance intervals: a signal code displayed by the flashing lamp notifies your customer when it's time to have the system checked!
- **Integrated diagnostics** with counters and recent alarms log (shown on the control panel display)

### AES-128 ENCRYPTION and protected mode

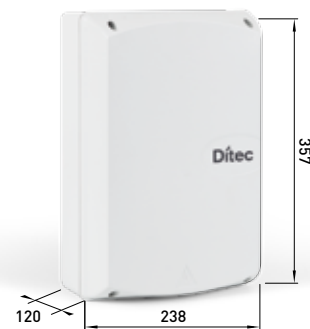
- Ditec LCA is already capable of receiving radio signals with **AES-128 encryption**: this lets you use ZEN series remote controls in AES-128 bit encrypted mode, making the use of **cloned transmitters impossible**
- But that's not all! This control panel can be set to operate just with remote controls programmed with a **custom installation code** of your choice (PROTECTED Mode, configured with ZENPAD)



## FULL COMPLIANCE WITH EUROPEAN DIRECTIVES AND STANDARDS

- **2014/30/EU - EMCD** - Electromagnetic compatibility directive
- **2014/53/EU - RED** - Radio equipment directive
- **2006/42/EC - Machines Directive** - (Annex II-B; Annex II-A; Annex I-Chapter 1)
- **2011/65/EU - RoHS 2** - Restriction of Hazardous Substances Directive concerning the use of hazardous substances in electrical and electronic equipment
- **EU standard for functional safety:** EN ISO 13849-1:2015





LCA70  
LCA80

## MAIN FUNCTIONS OF THE SYSTEM

DESCRIPTION	LCA70	LCA80
Radio frequency	433.92 MHz in standard configuration 868.35 MHz with ZENPRS or with BIXPR2	433.92 MHz with ZENRS or with BIXR2 868.35 MHz with ZENPRS or with BIXPR2
Interchangeable receiver module 433.92 MHz --> 868.35 MHz	■	■
Mains power supply	230 Vac - 50/60 Hz	230 Vac - 50/60 Hz
Motor power supply	230 Vac / 1 x 4 A 230 Vac / 2 x 2 A	230 Vac / 1 x 4 A 230 Vac / 2 x 2 A
Accessory power supply	24 Vdc + 24 Vac / 0.3 A	24 Vdc + 24 Vac / 0.5 A
Stroke management	end stop detection or limit switch	end stop detection or limit switch
Limit switch provision	■	■ only with 1 motor
Energy saving (GREEN mode)		■
Operating temperature	-20°C ÷ +55°C in standard conditions (-35°C ÷ +55°C with NIO system active)	-20°C ÷ +55°C in standard conditions (-35°C ÷ +55°C with NIO system active)
Protection rating of electrical panel	IP55	IP55
Opening 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	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, which can be selected from the display	■
Flashing light	230 Vac	230 Vac
Electric lock	12 Vac 15 W	12 Vac 15 W
Number of configurable 24 Vdc outputs	1	2
- gate open warning light (ON/OFF)	■	■
- gate open warning light with proportional flash mode	■	■
- courtesy light	■	■
- 24 Vdc LED flashing light	■	■
Configuration of programmable functions	display and navigation buttons	display and navigation buttons
Force adjustment	■ (electronics)	■ (electronics)
Approach speed	adjustable	adjustable
Operation time	adjustable	adjustable
Thrust on obstructions	adjustable	adjustable
Stop approach	adjustable	adjustable
Automatic closing time	adjustable	adjustable
Compatibility with hydraulic motors	■	■
Heavy traffic management	■	■
Integrated datalogging (counters and recent alarm log)	can be viewed on display	can be viewed on display
FW update	with Amigo and USBPROG software	with Amigo and USBPROG software
Safety stop (emergency stop)	■	■
Safe closing (inversion)	■	■
Safety test function (for self-testing safety devices)	■	■
ODS - Obstruction Detection System (stops current movement or reverses movement if an obstacle is detected)	■	■
NIO - Antifreeze system	■	■
Safety edge with 8.2kΩ resistance	■ with accessory	■ in opening and closing (terminal connectors already integrated in the control panel)
Magnetic loop detector	■ with accessory LAB9	■ with accessory LAB9