Last version of this manual
IP2357EN • 2022-10-24

Ditec EL400

Made in Italy

Installation manual for digital control unit for 3-phase motors with encoder or mechanical limit switches

(Translation from original instructions)

Index

Key

This symbol indicates instructions or notes regarding safety, to which special attention must be paid.

This symbol indicates useful information for the correct operation of the product.

General safety precautions for technical personnel

ATTENTION! Important safety instructions.
Please follow these instructions carefully. Failure to observe the information given in this manual may lead to severe personal injury or damage to the equipment.
Keep these instructions for future reference. This manual and those for any accessories can be downloaded from www.ditecautomations.com

This installation manual is intended for qualified personnel only •Installation, electrical connections and adjustments must be performed by qualified personnel, in accordance with Good Working Methods and in compliance with the current regulations • Read the instructions carefully before installing the product. Wrong installation could be dangerous • Before installing the product, make sure it is in perfect condition. The packaging materials (plastic, polystyrene, etc.) should not be discarded in the environment or left within reach of children, as they are a potential source of danger • Do not install the product in explosive areas and atmospheres: the presence of inflammable gas or fumes represents a serious safety hazard • Make sure that the temperature range indicated in the technical specifications is compatible with the installation site • Before installing the motorization device, make sure that the existing structure, as well as all the support and guide elements, are up to standards in terms of strength and stability. Verify the stability and smooth mobility of the guided part, and make sure that no risks of fall or derailment subsist. Make all the necessary structural modifications to create safety clearance and to guard or isolate all the crushing, shearing, trapping and general hazardous areas • The motorization device manufacturer is not responsible for failure to observe Good Working Methods when building the frames to be motorized, or for any deformation during use • The safety devices (photocells, safety edges, emergency stops, etc.) must be installed taking into account the applicable laws and directives, Good Working Methods, installation premises, system operating logic and the forces developed by the motorized door or gate • The safety devices must protect against crushing, cutting, trapping and general danger areas of the motorized door or gate. Display the signs required by law to identify hazardous areas. Each installation must bear a visible indication of the data identifying the motorized door or gate • Before connecting the power supply, make sure the plate data correspond to those of the mains power supply. An omnipolar disconnection switch with a contact opening distance of at least 3 mm must be fitted on the mains supply. Check that there is an adequate residual current circuit breaker and a suitable overcurrent cutout upstream of the electrical installation in accordance with Good Working Methods and with the laws in force • When requested, connect the motorized door or gate to an effective earthing system that complies with the current safety standards • Before commissioning the installation to the end user, make sure that the automation is adequately adjusted in order to satisfy all the functional and safety requirements, and that all the command, safety, and manual release devices operate correctly.
During installation, maintenance and repair operations, cut off the power supply before opening the cover to access the electrical parts • The protection cover of the operator must be removed by qualified personnel only.
The electronic parts must be handled using earthed antistatic conductive arms. The manufacturer of the motorization declines all responsibility if component parts not compatible with safe and correct operation are fitted • Only use original spare parts for repairing or replacing products • The installer must supply all information concerning the automatic, manual and emergency operation of the motorized door or gate, and must provide the user with the operation and safety instructions.

Description

Specific use

The control unit is specific for doors moved by a single motor.
Safely operation are guaranteed only with the normal specific use.
Ditec is not responsible for improper use or non-compliance with safety instruction contained in this manual.
No-changes are permetted, otherwise the declaration of conformity will be considered void.

WARNING: it is recommended to activate the impulsive mode only after having completed the set-up and adjustments of the control unit. In particular, during the limit switches adjustment select only the deadman operation mode.

Spare parts

Use only original spare parts.

EC Declaration of Conformity

We:
ASSA ABLOY Entrance Systems AB
Lodjursgatan 10
SE-261 44 Landskrona
Sweden

Declare under our sole responsibility that the types of equipment with names:

Ditec EL400	Control units for sectional doors 400 V 3~ or 230 V 3~ operators

Comply with the following directives and their amendments:

2014/35/EU	Low Voltage Directive (LVD)
2014/30/EU	Electromagnetic Compatibility Directive (EMCD)
2011/65/EU	Restriction of hazardous substances (RoHS 2)
2015/863/EU	Restriction of hazardous substances (RoHS 2 Amendment)

Harmonized European standards that have been applied:

EN 61000-6-3 (2007) + A1:2011 Emission – Residential
EN 61000-6-2 (2019) Immunity – Industry
EN 60335-1:2012 + A11:2014 + A13:2017 + A14:2019 + A15:2021
EN 60335-2-103 (2015)

The manufacturing process ensures the compliance of the equipment with the technical file.

Responsible for technical file:

Matteo Fino
BSP Ind channel & Gate Automation
Ditec S.p.A.
Largo U. Boccioni, 1
21040 Origgio (VA)
Italy

Signed for and on behalf of ASSA ABLOY Entrance Systems AB by:

Place	Date	Signature	Position
Origgio	2022-10-24	Matteo Fino	Head of Ind channel & Gate Automation

UK Declaration of Conformity

We:
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SE-261 44 Landskrona
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Ditec EL400 Control units for sectional doors 400 V 3~ or 230 V 3~ operators

Comply with the following directives and their amendments:

- Electrical Equipment (Safety) Regulations 2016
- Electromagnetic Compatibility Regulations 2016
- The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 (RoHS)

Harmonized European standards that have been applied:

EN 61000-6-3 (2007) + A1:2011 Emission – Residential
EN 61000-6-2 (2019) Immunity – Industry
EN 60335-1:2012 + A11:2014 + A13:2017 + A14:2019 + A15:2021
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Place	Date	Signature	Position
Origgio	2022-10-24	Matteo Fino	Head of Ind channel & Gate Automation

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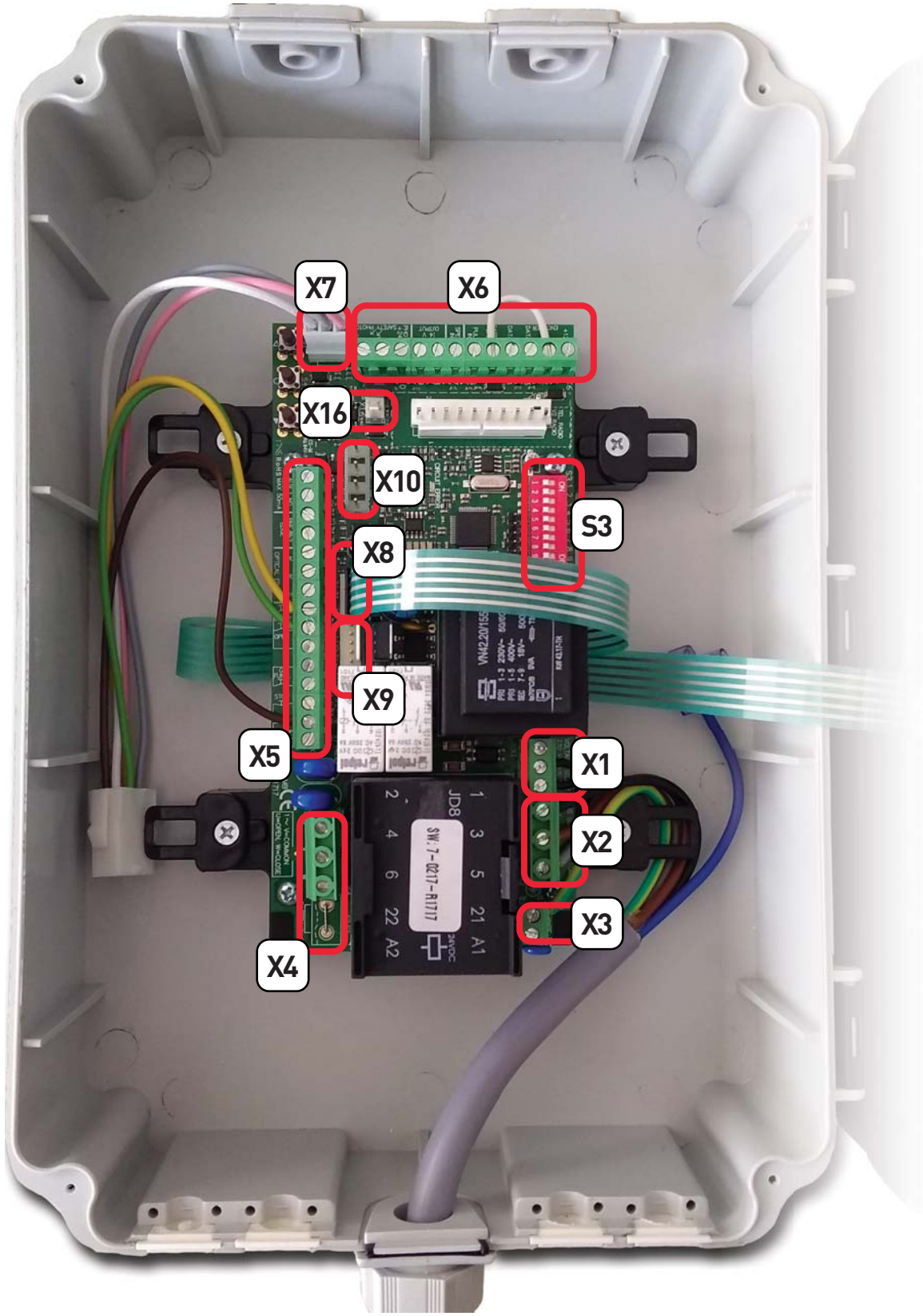
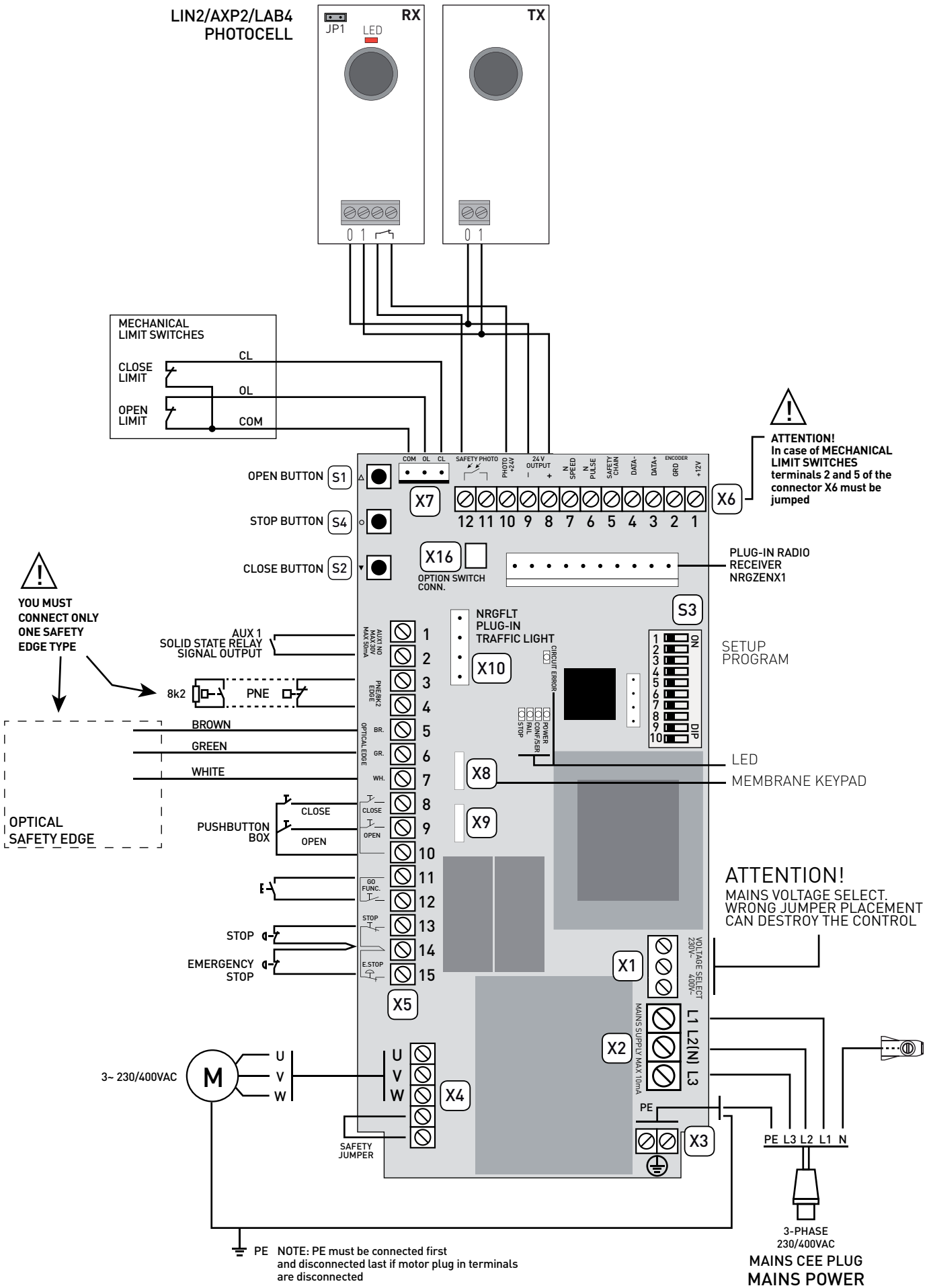
Technical details

Installation	Vertical on a flat wall
Temperature range (operating)	-10 °C / +50 °C
Humidity	Up to 93% RH non-condensing
Degree of protection	IP54
PCB dimension [mm]	163x225x80
Supply voltage	400 V 3~; 50/60H; ± 10% L1,L2,L3,PE ('N' required ONLY for services) 230 V 3~; 50/60H; ± 10% L1,L2,L3,PE Mains fuse max: 3 x 10 A
Transformer	Max 10 VA , VDE 0570/EN61558 Secondary winding is overload protected by fuses
Motor output	Max motor load by 400 V 3~: 2.2 kW
Emergency stop, Stop, Thermo spec. door stop and Safety chain	Function as normal stop command and disconnect power to contactor coils
24 V⎓ Output (terminals X6-8,9)	24 V⎓ ± 20% (non-regulated), Max load: 100 mA
Safety edge input (X5-3 and 4)	PNE/air switch Electric type - 8.2 kΩ termination ± 10% Optical type (Fraba OSE or Dalmatic TSS/RSS) Optical type Performance level C, Category 2
Optical safety edge (X5-5, 6 and 7)	Input voltage level high (green): 2.5 - 5.0 V Input voltage level low (green): < 0.5 V Input frequency range (green): 250 – 2000 Hz (50% duty-cycle) Pulse interval maximum (green): 7.0 ms (when not 50% dutycycle)
Photocell input (X6-8, 9, 10 and 12)	X3-18, 22 or X12 1, 3 External photocell, 24 V⎓ (e.g. self contain photocell) Performance level C, Category 2
Limits	Terminals X5 and X7 for mechanical limit (prewired). Terminal X6 for electronic limit.
AUX solid-state relay output (X5-1,2)	NO output. Max 30 V – Max 50 mA
Box dimension [mm]	210x305x120



X1	TERMINALS FOR VOLTAGE SELECTION	**X7**	TERMINALS FOR MECHANICAL LIMIT SWITCH
X2	MAIN SUPPLY TERMINAL (L1,L2(N),L3)	**X8**	PUSHBUTTON
X3	GROUND TERMINALS ⏚	**X9**	PUSHBUTTON
X4	PLUG IN CONNECTOR FOR MOTOR (U, V, W)	**X10**	TRAFFIC LIGHT LAMP SLOT NRGFTL - OPTIONAL
X5	TERMINALS FOR SAFETY DEVICES	**X16**	CONNECTOR FOR EXTERNAL AUTO CLOSE SWITCH
X6	PHOTO CELL TERMINALS AND ENCODER LIMIT SWITCH	**S3**	DIP SWITCH FOR PROGRAMMING


LIN2/AXP2/LAB4
PHOTOCELL
JP1
LED
RX
TX
0 1
0 1
MECHANICAL
LIMIT SWITCHES
CLOSE
LIMIT
OPEN
LIMIT
CL
OL
COM
ATTENTION!
In case of MECHANICAL
LIMIT SWITCHES
terminals 2 and 5 of the
connector X6 must be
jumped
OPEN BUTTON S1
STOP BUTTON S4
CLOSE BUTTON S2
X7
X6
12 11 10 9 8 7 6 5 4 3 2 1
X16
OPTION SWITCH
CONN.
PLUG-IN RADIO
RECEIVER
NRGZENX1
YOU MUST
CONNECT ONLY
ONE SAFETY
EDGE TYPE
AUX 1
SOLID STATE RELAY
SIGNAL OUTPUT
8k2
PNE
BROWN
GREEN
WHITE
OPTICAL
SAFETY EDGE
NRGFLT
PLUG-IN
TRAFFIC LIGHT
X10
S3
SETUP
PROGRAM
LED
X8
MEMBRANE KEYPAD
X9
PUSHBUTTON
BOX
CLOSE
OPEN
STOP
EMERGENCY
STOP
ATTENTION!
MAINS VOLTAGE SELECT.
WRONG JUMPER PLACEMENT
CAN DESTROY THE CONTROL
X1
X2
X5
X4
X3
3~ 230/400VAC
M
U
V
W
SAFETY
JUMPER
PE
L1 L2(N) L3
PE L3 L2 L1 N
3-PHASE
230/400VAC
MAINS CEE PLUG
MAINS POWER
PE NOTE: PE must be connected first
and disconnected last if motor plug in terminals
are disconnected

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1. Installation

For a correct installation:
- Install where the control unit can be protected from rain or adverse weather conditions
- Mounting must be vertical
- The mounting surface must be flat and not be subject to vibrations
- Do not install in an area of potential risk of condensation
- It is important that the door can be clearly seen from the position of the control while operating
- Install in an area not accessible to children or unauthorized persons
- Do not perform any electrical connections before the installation is completely accomplished

2. Electrical operating instructions

Read carefully and respect the connection's sequence.

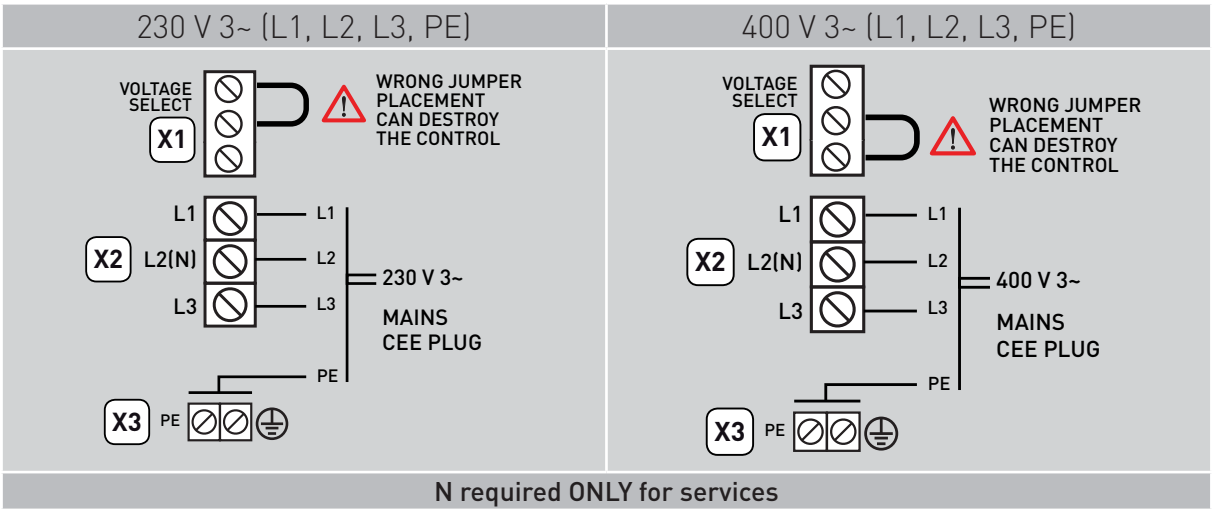
IMPORTANT! All the connection operations must be performed only after the main power supply has been disconnected.
TURN OFF THE MAIN POWER SWITCH BEFORE ANY OTHER OPERATION!

When connecting control to mains supply a mains isolator switch (16 A CEE - plug) according EN 12453 is required.
The supply disconnect device (main switch or CEE plug) must be installed between 0.6 m and 1.7 m above floor level.

2.1 Control unit power supply

The control unit can be powered in two different modes: 400 V 3~ or 230 V 3~ .

WARNING! The installation must include an automatic cut off switch with minimum distance between the contacts of at least 3 mm.
WARNING: The power supply of the motor and of the control unit must be the same. Otherwise you can damage the motor and the control unit and put at risk the safety of the installer.

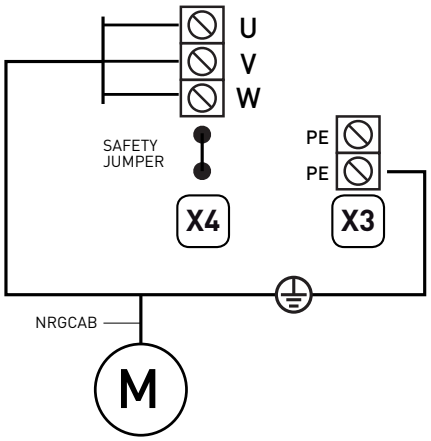


If you need to disconnect the power cable and then to reconnect it or change the control unit wiring sequence, you HAVE TO connect the wires properly, restoring the original configuration. Take care to connect the ground wire to the X3 terminal.

WARNING! Verify the direction of rotation of the motor supplied with 400 V 3~ or 230 V~: pay attention to the direction of rotation of the motor: by pressing the OPEN button (S1) the door has to open while, by pressing the CLOSE button (S2), the door must close. In case of wrong direction, reverse two of the phases (L1, L2 and L3) on the X2 terminal or U (OPEN) and W (CLOSE) on X4 terminal.

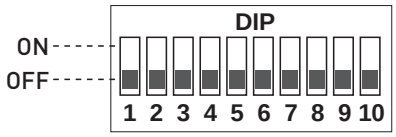
2.2 Connecting the control unit to the motor

After the motor and control are fitted they can be connected with a plug-in cable.
The cable has plugs on each end for an easy fitting.
The plugs for motor and control panel are
different and cannot be interchanged.



NOTE: PE must be connected first and disconnected last if motor plug-in terminals are disconnected.

3. Dipswitch functions



NOTE	OPERATING LOGIC	DIP 1	2	3	4	5	6	7	8	9	10
A	Dead-man OPEN/CLOSE	OFF	OFF	-	-	-	-	-	-	-	-
B	Impulse OPEN/CLOSE	ON	ON	-	-	-	-	-	-	-	-
C	Impulse OPEN / Deadman CLOSE	ON	OFF	-	-	-	-	-	-	-	-
	OPTIONS										
D	Auto close (after delay time)	ON	ON	ON	-	-	-	-	-	-	-
E	Electronic after run / edge monitoring (FUTURE USE)	-	-	-	ON	-	-	-	-	-	-
F	Force control (Multiturn) (FUTURE USE)	-	-	-	-	ON	-	-	-	-	-
	Force control fine sense (FUTURE USE)	-	-	-	-	-	ON	-	-	-	-
G	Go Function Standard	-	ON	-	-	-	-	OFF	-	-	-
	Go Function Special (Start/Stop, radio)	-	ON	-	-	-	-	ON	-	-	-
	Edge super fast reverse 0.05 sec (FUTURE USE)	-	-	-	-	-	-	-	ON	-	-
	Edge reverse time – Normal (FUTURE USE)	-	-	-	-	-	-	-	OFF	ON	-
	LIMIT SWITCH TYPE SELECTION										
	Mechanical limit switch	-	-	-	-	-	-	-	-	-	OFF
	Encoder limit switch	-	-	-	-	-	-	-	-	-	ON

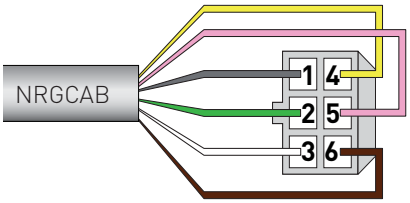
NOTE	SAFETY LOGIC
A	When an obstacle is detected during the DOWN operation the movement is stopped with a brief upward movement; It has no effect on the way UP.
B	When an obstacle is detected during the UP operation It has no effect. During the DOWN operation the movement is reversed until the opening limit switch.
C	When an obstacle is detected during the UP operation It has no effect. During the DOWN operation the movement is reversed until the opening limit switch
D	**This function can only be selected when DIP2 is in ON position and safeties are connected**. The auto closing time is preset to 15 Sec. To reset a new time setting, run the door to open position and push both open and close buttons for minimum 5 Sec. When the red LED START flashing, release the buttons. After that wait until the new desired auto closing time and then push the close button. Max auto closing time is about 4 min. If max setting time is exceeded, the red LED STOP flashing and the auto close time is adjusted back to 15 Sec. Auto closing time is remembered after power OFF. Auto closing can also be disabled with a switch connected to X16 connector.
G	Special technical information - see par. 9.

ADDITIONAL FEATURES	
PHOTO	Photo circuit is tested before every close operation. **Photo circuit must be connected during the setting process.**
SAFETY	The door cannot close when there is an error in the photo or safety edge. By a special code the door can close one time in hold to run mode. Press and hold STOP when pressing 222111 (2 = DOWN push button and 1 = OP push button). Code must be pressed within 6s. In addition to the photocell, only one type of additional safety device can be installed: PNE 8k2Ω (terminals 3-4) or optoelectronic safety edge (terminals 5-6-7).

4. Connect to mechanical limit switch motor

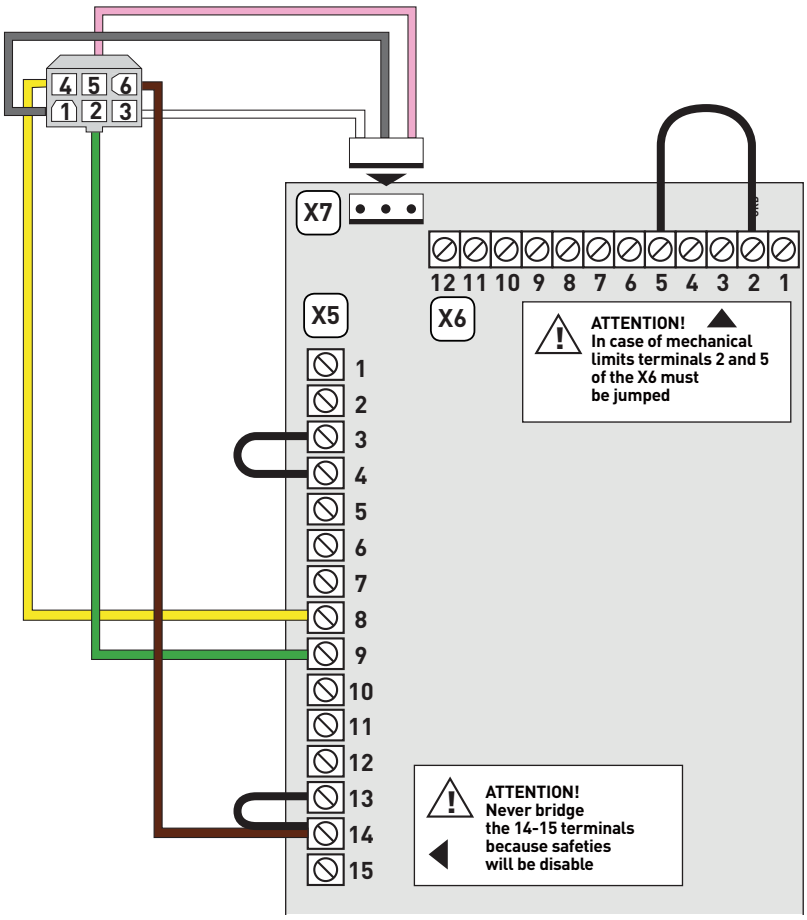
ATTENTION: if you connect a control unit already pre-set for mechanical limits to a motor with encoder limits, the motor won't work correctly. In particular, the motor will not find the limit positions and this could put at risk the safety of people and/or things.

In order to connect the Ditec EL400 with a motor with mechanical limits set the DIP10 on S3 in OFF.



1	GREY	> OPEN LIMIT SWITCH
2	GREEN	> OPEN BUTTON
3	WHITE	> SAFETY
4	YELLOW	> CLOSE BUTTON
5	PINK	> CLOSE LIMIT SWITCH
6	BROWN	> SAFETY

NOTE: If you do not use a Ditec NRGCAB multicore cable, you must use a cable with an AMP 0172168 connector on both ends.



4.1 Programming with mechanical limit switch

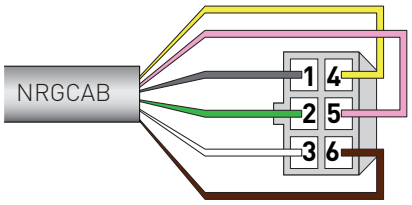
ATTENTION: to let the safeties work, these must be connected **BEFORE** starting the control unit setup.

	SETUP PROCESS - MECHANICAL LIMITS STANDARD
1	Set DIP10 in OFF position for selecting mechanical limits and DIP1 and DIP2 to OFF position for deadman operation. Standard control for mechanical limits are for PNE edge type (3-4 terminals on X5) and no photo connected. **ATTENTION: Switching DIP10 to ON position and back to OFF will reset to mechanical standard with ONLY PNE edge type.**
2	Press OPEN or CLOSE to the desired close and open limit position and adjust cam until the limit is correct. **NOTE**: if door is moving in the wrong direction the 2 phases on the mains connection must be interchanged.
3	Limits are now adjusted. Check that the safety edge is working (if mounted).
	SETTING PROCESS - MECHANICAL LIMITS WITH OTHER SAFETY CONNECTED **ATTENTION: additional safeties as OSE (connected to X5 5-6-7) or photocell (connected to X6 8-9-10-12) will be active only after the setting process.**
4	Make setup process 1 and 2 and move the door away from close limit.
5	Connect the requested safeties. Activate setting by pressing OPEN+STOP for about 10 sec then release. The red LED FAIL (PCB) start with 2 short flashes.
6	Press STOP to stop setting the edge type and photo. Yellow LED SPEED/SER confirming with 1 sec.
7	Limits are now adjusted and edge type and photo circuit are memorised. Check that the safety functions are working as expected. **ATTENTION: moving DIP10 to ON position and back to OFF will reset to mechanical standard with ONLY PNE edge type.**

5. Connect to electronic limit switches motor

ATTENTION: if you connect a control unit already pre-set for mechanical limits to a motor with encoder limits, the motor won't work correctly. In particular, the motor will not find the limit positions and this could put at risk the safety of people and/or things.

In order to connect the EL400 with a motor with electronic limit switch:
① remove the 3pins white terminal from the cable (Fig. 5A);
② peel the 3 wires and connect them as showed in Fig. 5B;
③ jumped 14-15 terminals;
④ set DIP10 to ON.



1	GREY	> GND
2	GREEN	> DATA -
3	WHITE	> GND
4	YELLOW	> DATA +
5	PINK	> SAFETY
6	BROWN	> +12 V

NOTE: If a Ditec NRGCAB multicore cable is not used, you must use a cable with an AMP 0172168 connector on both ends.

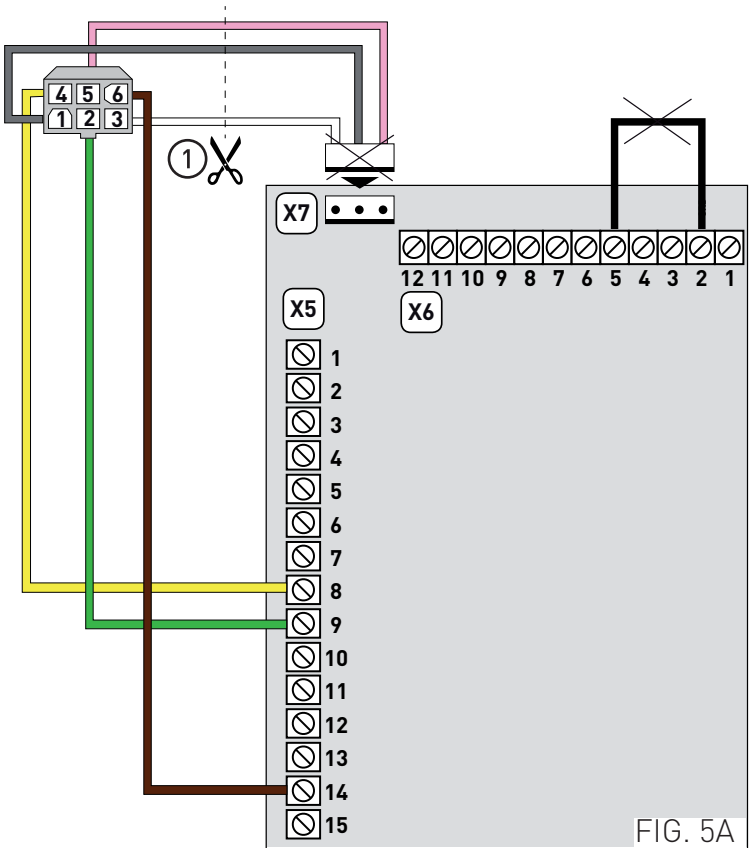


FIG. 5A

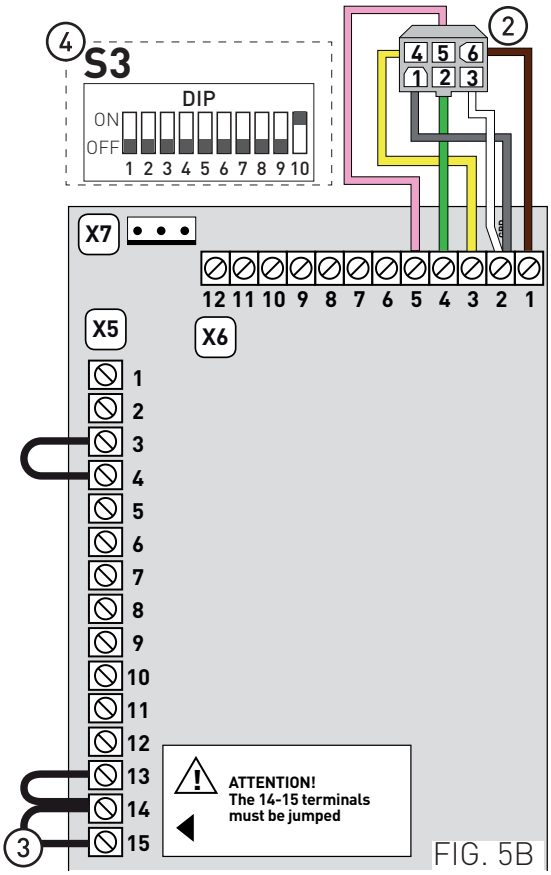


FIG. 5B

5.1 Programming with electronic limit switch

ATTENTION: to let the safeties work, these must be connected **BEFORE** starting the control unit setup.

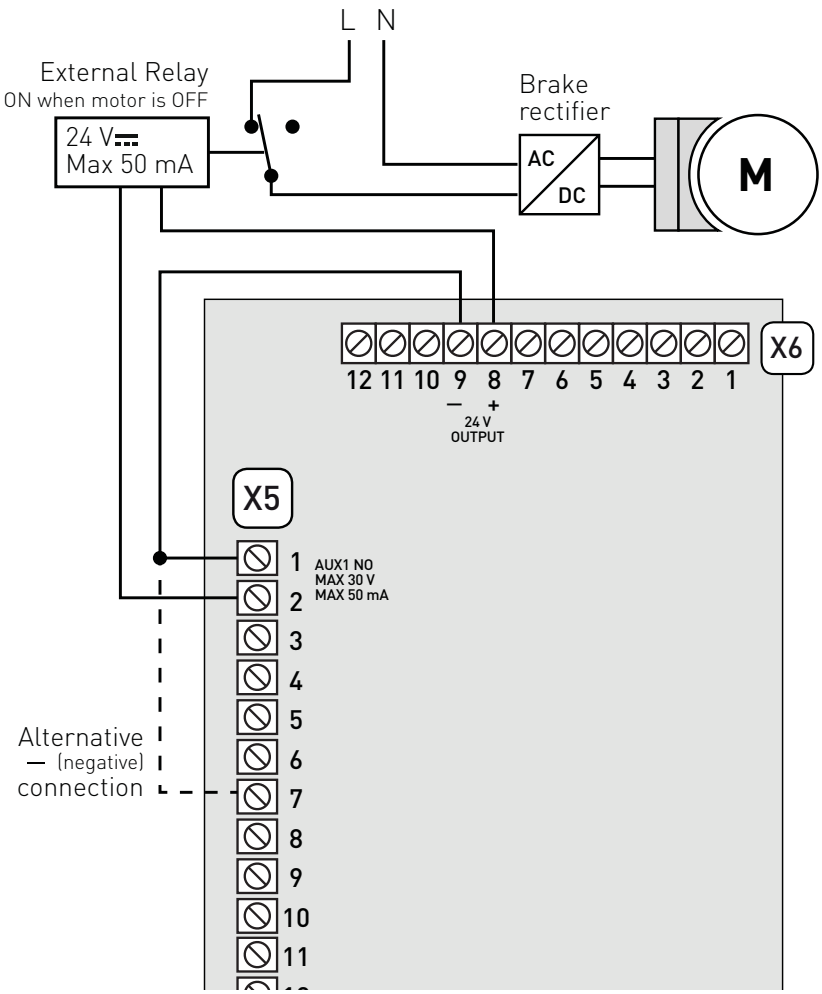
	SETUP PROCESS - ELECTRONIC LIMIT SWITCH
1	Turn OFF the power and connect the encoder and all safety equipment. The controller memorises the encoder type by power-up.
2	Set DIP10 in ON position and turn the power ON. Activate setting by pressing OPEN + STOP for about 10 sec until the red LED FAIL (PCB) starts with 2 short flashes. **WARNING: switching DIP10 ON and then OFF again restores the factory settings with only the pneumatic safety edge activated.**
3	First press the CLOSE button to the desired down limit position. **NOTE**: if door is moving in the wrong direction the 2 phases on the mains connection must be interchanged. (Alternatively choose the special phases interchange function by pressing OPEN + STOP for 20 sec. - Yellow LED SPEED/SER confirming with 1 sec.)
4	Press STOP to set the down limit position. Yellow LED SPEED/SER confirming with 1 sec.
5	Press OPEN to the desired UP limit position. By open position you can adjust the UP limit position finely by running OPEN and CLOSE, but first operation must be in OPEN direction for minimum 2 sec.
6	Press STOP button to save the UP limit position, encoder direction, **edge type and photo**. Yellow LED SPEED/SER confirming with 1 sec
7	Limits are now adjusted and edge type and photo circuit are set. Check that the safety edge and photo functions are working as expected.

6. Brake relay connections on AUX1

NOTE: the Ditec EL400 control panel is compatible with third-party motors with a brake.

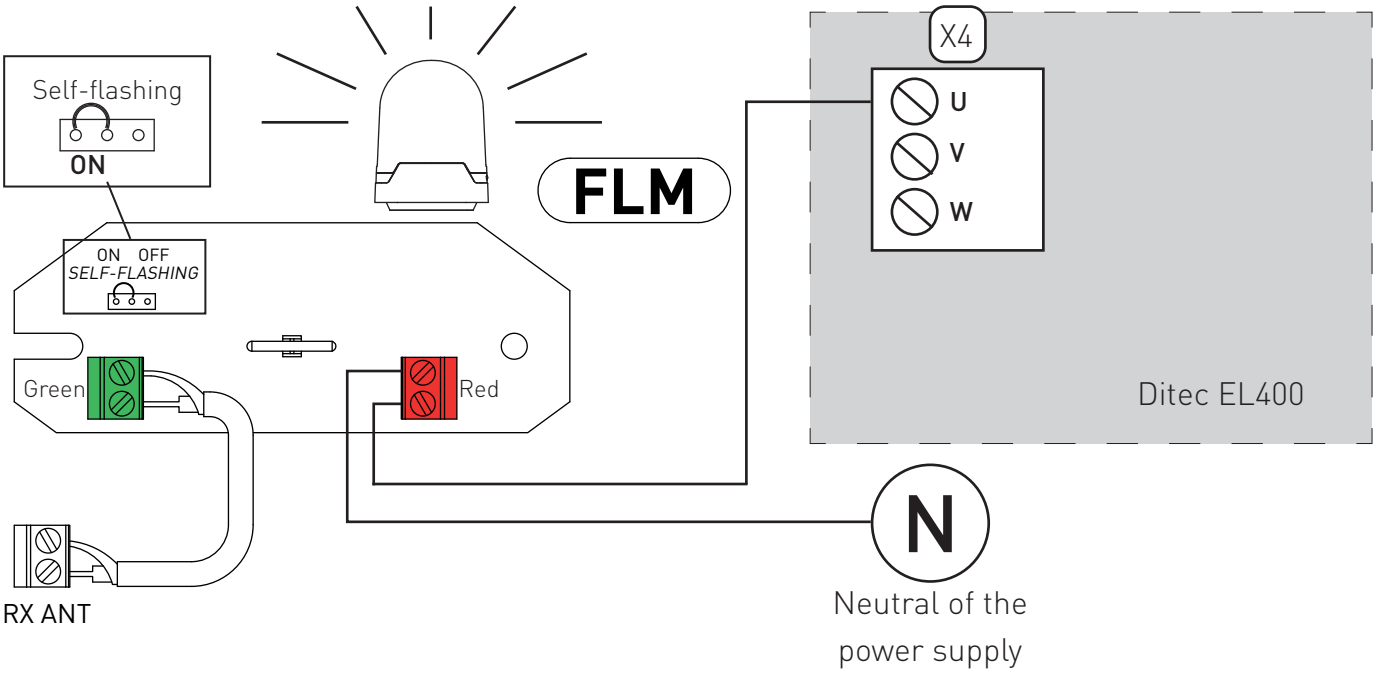
AUX1 output is going OFF 30ms before motor contactor is turned ON for releasing the brake a brief time before motor starts.

AUX1 output is going ON 20ms before motor contactor is turned OFF, for activating the brake a brief time before motor stops.



7. Flashing light connections

NOTE: only for 3phase power supply.



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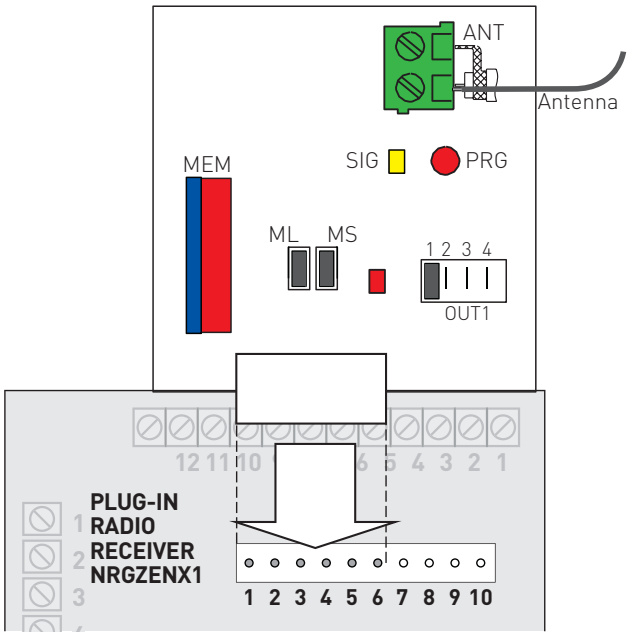
8. Plug-in radio receiver NRGZENX1 (optional)

By inserting the radio module in the specific connector, it is possible to command the control panel with a ZEN series remote control.

Put DIP7 in ON.

NOTE: for the configuration of the transmitters, refer to the instructions of the NRGZENX1 receiver.

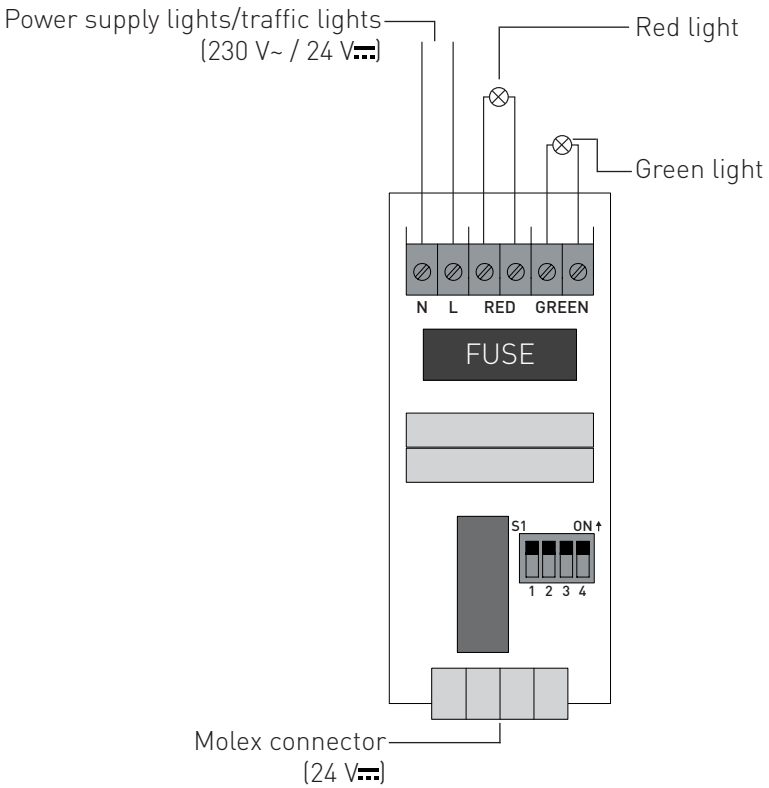


9. Plug-in traffic light NRGFTL (optional)

This is a plug-in board to be used with the EL400 in order to control flashing lights, courtesy lamps or traffic lights during the operation of the door or shutter.

Connect the NRGFTL to X10.

NOTE: the possible operation options are described in the related instruction manual.



10. Special technical information

CONDOMINIUM OPERATING LOGIC (GO function)

The remote control signal always commands the opening except when the door is fully open. In this case it orders the closure.

GO function is available on 11-12 clips of the X5 terminal board.
DIP7 set to OFF.

If photocell is connected to controller:

- When the door is close > the door will open
- When the door is open > the door will start closing
- When the door is running down > the door will open
- When the door is running up > no change

If no photocell is connected to controller:

- When the door is close > the door will open
- When the door is open > no closing (for safety reason because no photo)
- When the door is running down > the door will open
- When the door is running up > no change

STEP-by-STEP OPERATING LOGIC (GO function Special)

Each activation of the remote control do this sequence commands OPEN > STOP > CLOSING > STOP

GO function Special is available on 11-12 clips of the X5 terminal board.
DIP7 set to OFF.

If photocell is connected to controller:

- When the door is close > the door will do opposite of last
- When the door is open > the door will start closing
- When the door is running down > the door will stop and next push opening
- When the door is running up > the door will stop and next push closing

If no photocell is connected to controller:

- The Go function Special is not active when no photo is connected. (safety)

DISABLE THE PHOTOCELLS BEFORE THE DOOR REACHES THE GROUND

To disable the photocells a little distance before close limit:

1. Move the door to the desired disabling point.
2. Push STOP button first, hold STOP button with OPEN-CLOSE together for 5sec.
3. Confirm LED will flash 1sec.
4. Check that the disabling point is correct.

ATTENTION: the point where the photocells are disable must be as low as possible, in order to keep the installation safety.

ATTENTION: in case of a complete reprogramming, the disable photocells point must be set again.

11. Troubleshooting

11.1 LED guidance - mechanical limit switch

Yellow LED CONF./SER. (PCB)	
Fixed light	Service needed (open counts reached)
1 sec. flash	Confirming of learning process

Red LED FAIL (PCB)	
Fixed light	If Photo or Edge is activated when CLOSE pushbutton is activated
1 long flash	Auto close setting active
2 long flashes	Limits, edge and photo not learned
2 long flashes	Force control not learned (FUTURE USE)
3 long flashes	Door stopped by force control (FUTURE USE)
4 long flashes	Door stopped by runtime
5 long flashes	Door stopped by force control wear (FUTURE USE)
6 long flashes	Tacho failure – pulses missing (FUTURE USE)
Continues long flashes	Fail state PNE edge monitoring. Check impuls by floor missing (FUTURE USE)

Yellow LED STOP (PCB)	
Fixed light	Stop activated or both limits are active
1 long flash	Safety chain activated
2 long flashes	Photo – safety test failed.
3 long flashes	Safety edge – safety test failed
4 long flashes	Stop circuit – safety test failed
5 long flashes	Safety chain – safety test failed
6 long flashes	EEPROM failure. Elec. Counter or position counter by force control
7 long flashes	EEPROM failure. Powerup failure
8 long flashes	Welded contactor fail
9 long flashes	Internal watchdog timeout.
10 long flashes	Main processor crystal fail

Green LED POWER (PCB)	
Fixed light	The Control Unit has power

Red LED CIRCUIT ERROR (PCB)	
Fixed light	PCB circuit error fail

11.2 LED guidance - electronic limit switch

Yellow LED CONF./SER. (PCB)	
Fixed light	Service needed (open counts reached)
1 sec. flash	Confirming of learning process

Red LED FAIL (PCB)	
Fixed light	If Photo or Edge is activated when CLOSE pushbutton is activated
1 short flashes	No answer from encoder. Check RS485.
1 long flash	Auto close setting active
2 short flashes	Limits, edge and photo not learned
2 long flashes	Force control not learned (FUTURE USE)
3 long flashes	Door stopped by force control (FUTURE USE)
4 short flashes	Wrong limit switch setting
4 long flashes	Door stopped by runtime
5 long flashes	Door stopped by force control wear (FUTURE USE)
6 long flashes	Tacho failure – pulses missing (FUTURE USE)
7 short flashes	Encoder position out of learned area. (Reset by power up or resetting)
8 short flashes	Kostal encoder – Power failure
Continues long flashes	Fail state PNE edge monitoring. Check impuls by floor missing (FUTURE USE)

Yellow LED STOP (PCB)	
Fixed light	Stop activated or both limits are active
1 long flash	Safety chain activated
2 long flashes	Photo – safety test failed
3 long flashes	Safety edge – safety test failed
4 long flashes	Stop circuit – safety test failed
5 long flashes	Safety chain – safety test failed
6 long flashes	EEPROM failure. Elec. Counter or position counter by force control
7 long flashes	EEPROM failure. Powerup failure
8 long flashes	Welded contactor fail
9 long flashes	Internal watchdog timeout
10 long flashes	Main processor crystal fail

Green LED POWER (PCB)	
Fixed light	The Control Unit has power

Red LED CIRCUIT ERROR (PCB)	
Fixed light	PCB circuit error fail

The crossed-out wheelie bin symbol indicates that the product should be disposed of separately from normal household waste. The product should be recycled in accordance with local environmental regulations for waste disposal. By separating a product marked with this symbol from household waste, you will help reduce the volume of waste sent to incinerators or land-fill and minimise any potential negative impact on human health and the environment.

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