

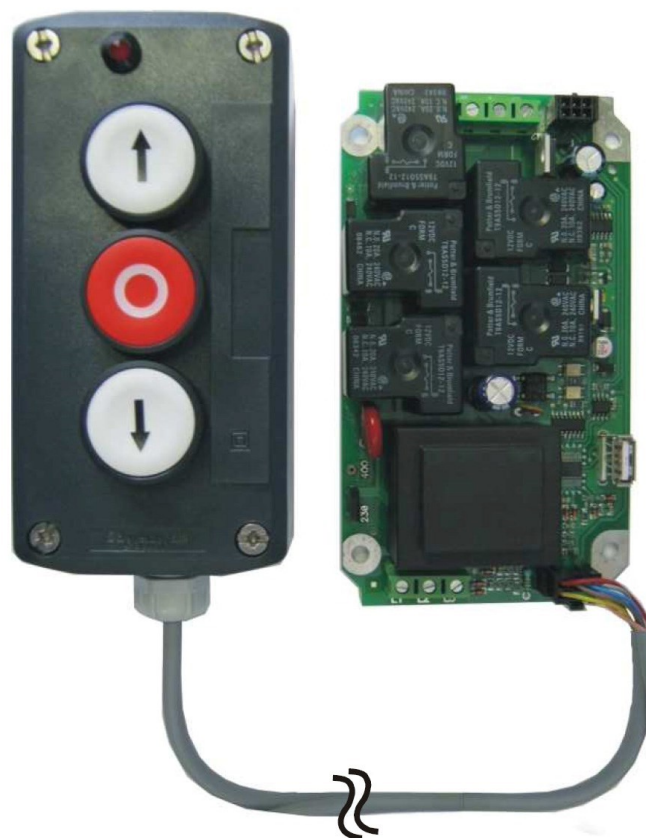
Installation and connection manual

N°7158

06/19

Sectional Industry Doors

INDUS operator **SE1i** (single phase) **or SE3i** (triple phase)



(Document reserved for installers)

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Equipment required for installation

- | | |
|--|--|
| <ul style="list-style-type: none"> - Ladders - Clamps and locking pliers - Spirit level - Plumb bob - Cord - Tape measure (5M) - Hammer drill - Screwdriver equipped with a 10 mm hexagonal bit - Steel pins for screws (Ø6 max) and suitable concrete drill bits - Hammer | <ul style="list-style-type: none"> - Flat wrenches : 10 and 13 mm - Hexagon keys : 4 mm - Socket wrenches : 10 and 13 mm - Steel drill bit with Ø4.2 mm max. length of 30 mm - Steel drill bits Ø5.5, Ø6.5, Ø10, Ø11 mm. - Screwdriver - Grease and brush - Can of oil - Hacksaw - Grinder |
|--|--|

Installation instructions



WARNING !

To ensure that this product is assembled, used and maintained in complete safety, is important to follow the instructions provided in this document.

For everyone's safety, observe the following precautionary measures.



- * Before beginning the assembly, read this manual carefully.
- * This fence element must be installed by a professional technician.
- * All the parts delivered are specifically sized for this product. Adding and/or using other parts may be detrimental to safety and may affect the product's warranty.
- * Any modification or improvement of this fence element must be compliant with the standard EN 13241 + A2. In this case, a "modification/transformation" file must be created by the installer as per the standard EN 12635 annex C.
- * Considerable force is exerted by the torsion springs. This work must therefore be carried out in accordance with the safety instructions. Use the appropriate tools to install these products. Ensure that the work is carried out on a stable floor.
- * Ensure that the assembly area is adequately lit, clear, clean and clearly marked out.
- * Ensure that no other people apart from the installers are present on the construction site. Non-authorized persons (children for example !) who are present at the site risk injury during assembly.
- * All the components of this fence element must be installed in compliance with the installation instructions provided in this manual.
- * All the requirements of the standards EN 13241 + A2 must be met and verified if necessary.



- Before starting to assemble the operator, it is essential to make sure the door operates manually.
- It must not be undercompensated or overcompensated and must not exhibit hard points during maneuvers.
- European Standard 13241 + A2 requires "safety devices" that do not allow a door to be operated if it is incorrectly installed.

Mounting the operator

IMPORTANT

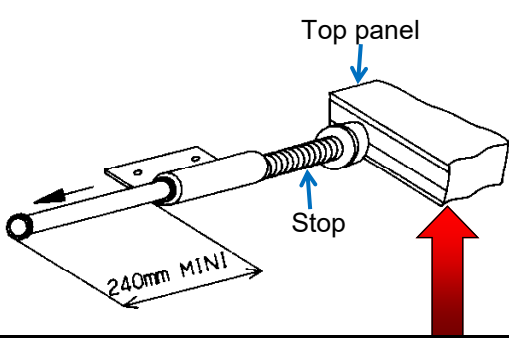
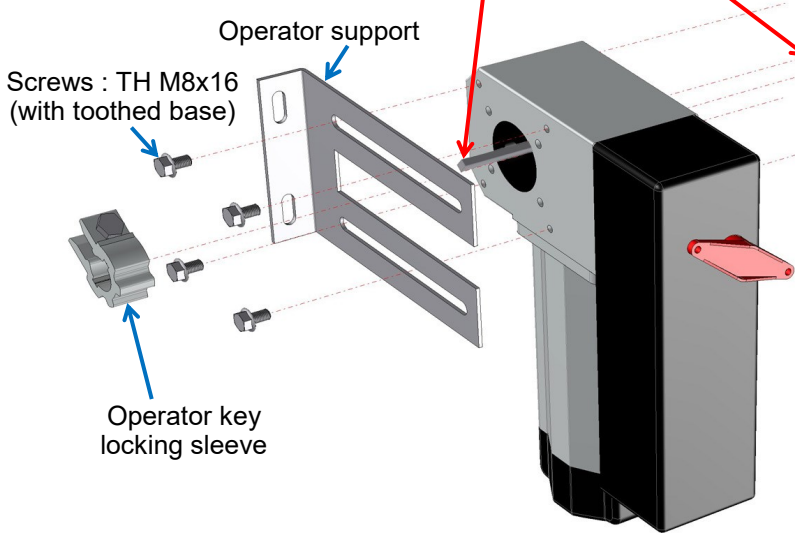
If hollow axis : Key 9.5 x 6.3 mm, length 75 mm
(KIT n°243 in accessory pack)



If solid axis : Key with 6.3 x 6.3 mm pointed screw
length 105 mm (Bag in operator pack)

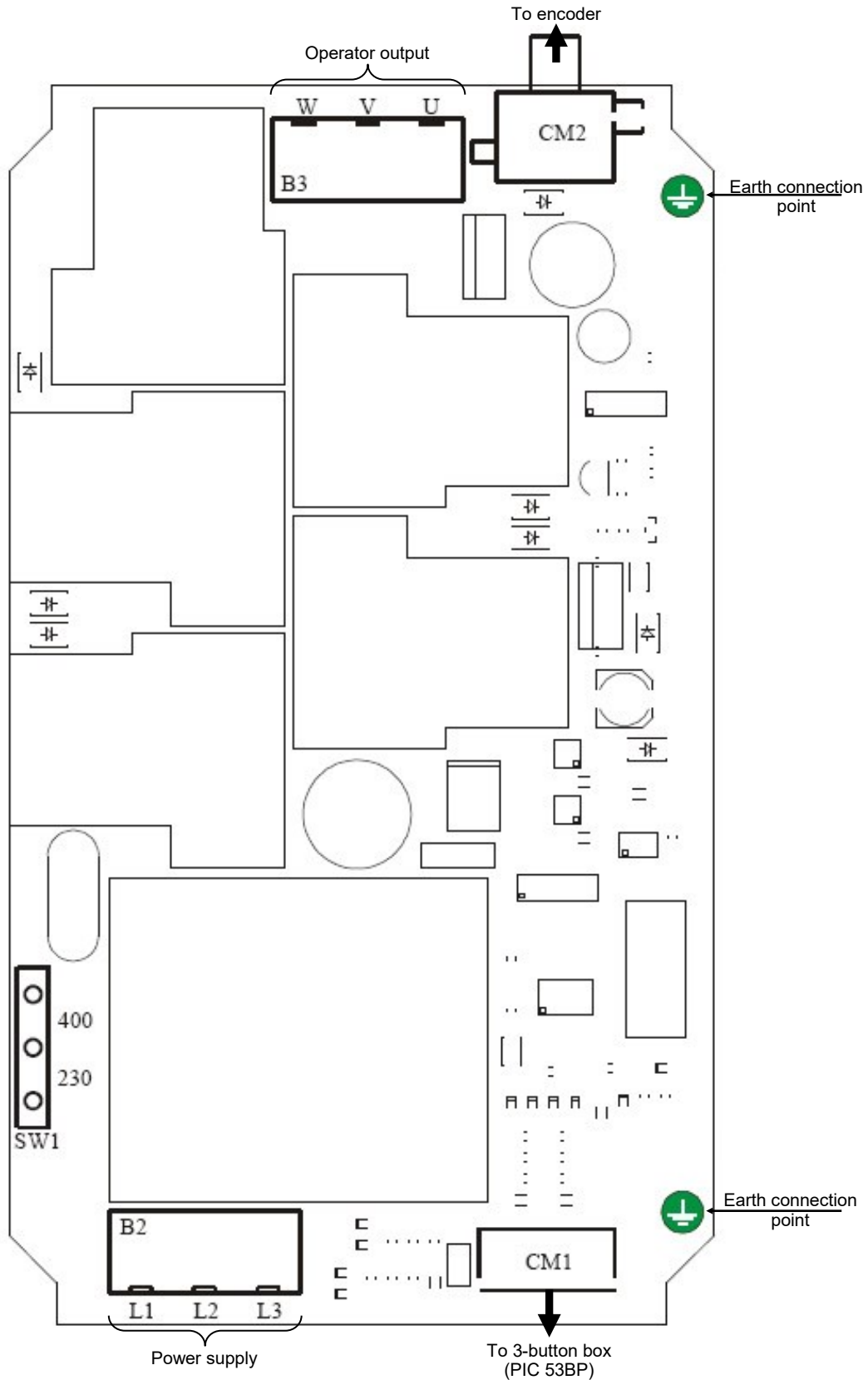


! Different key depending on the axis (hollow or full)



! In the case of a large stop, it must absolutely be compressed by the door raised as above (min. 240 mm)

Operator board layout (PIC 500)




⚠ The PIC 500's "Operator Output" is unprotected : It is compulsory to install the appropriate protection upstream of the "Power supply" input according to the type of operator used.
Protection/maximum caliber : Thermal-magnetic operator circuit breaker type GV2 ME10 4-6.3 Amps or fuse **aM 6** Amps.

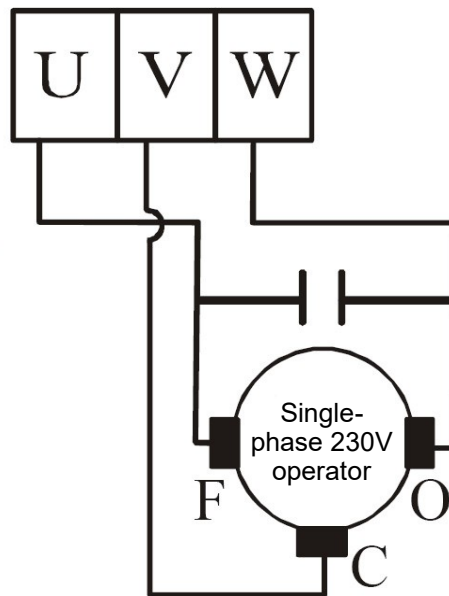
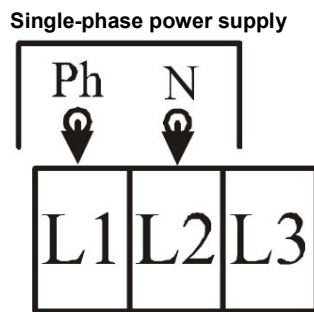
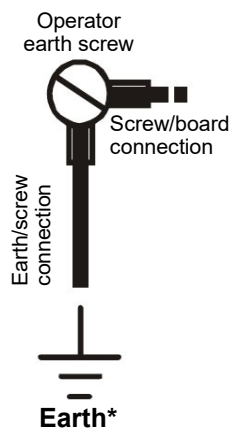
Power and operator connection

Motorization	Connection	SW1 jumper
230V Single-phase	Power supply : Phase = terminal L1/Neutral = terminal L2 Operator : Common = V/Opening = W/Closing = U Place a capacitor between U and W	230
230V Three-phase	Power supply : L1 - L2 - L3 Operator : U - V - W	230
400V Three-phase	Power supply : L1 - L2 - L3 Operator : U - V - W	400

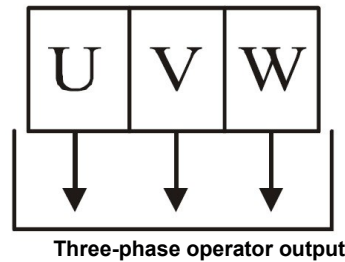
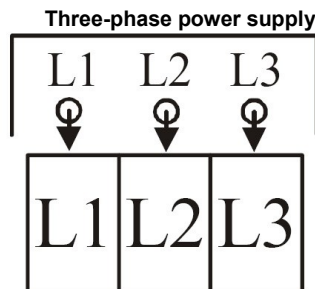
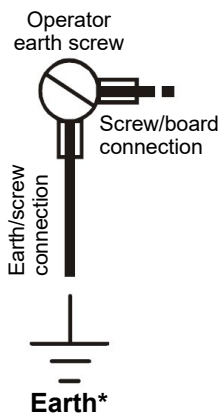
 **Right-turning field.**

 **Before all connections, check the configuration of jumper SW1.**

Single-phase 230V operator



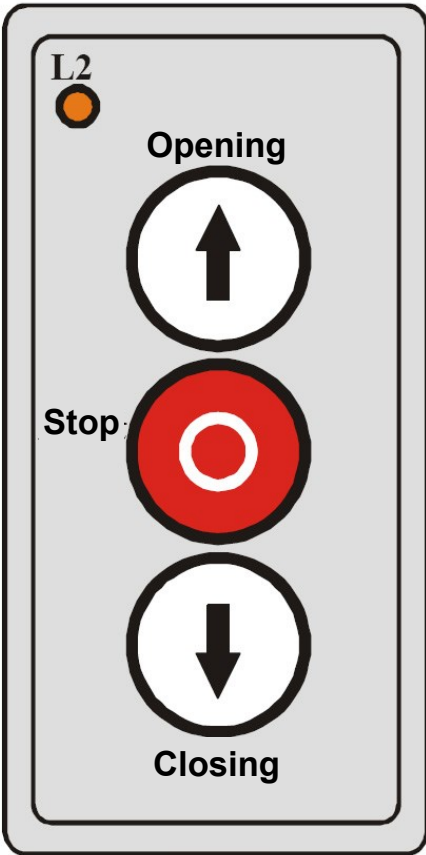
Three-phase operator 230V or 400V



*** An operator earth screw allows the connection of a lug to establish the earth connection. This link is mandatory.**

3-button box (PIC 53BP) connection to operator board (PIC 500)

! The fixed controls must be installed within sight of the door but away from any moving parts and at a height of at least 1.5 m from the floor.



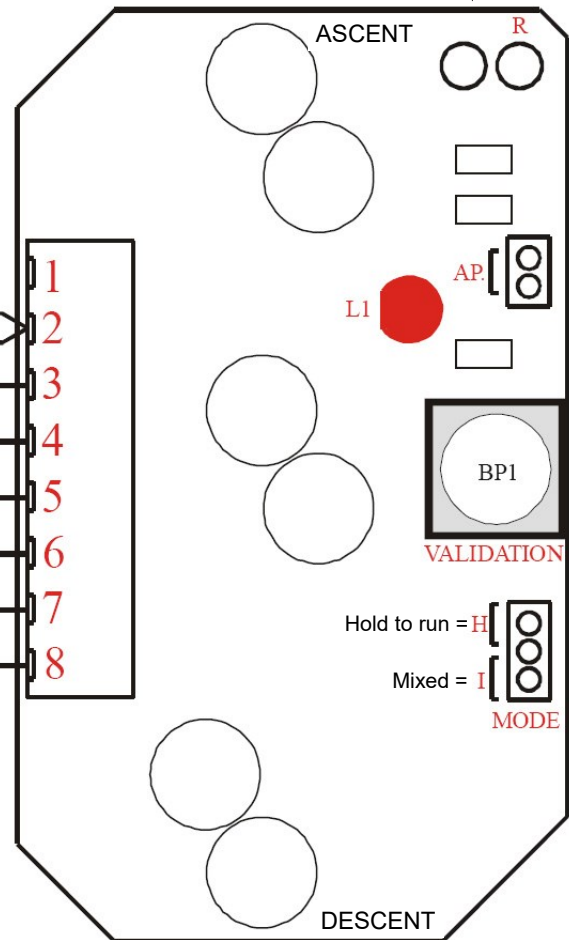
3-button box (exterior view)

L1 (inside view) and L2 (outside view) have the same function.

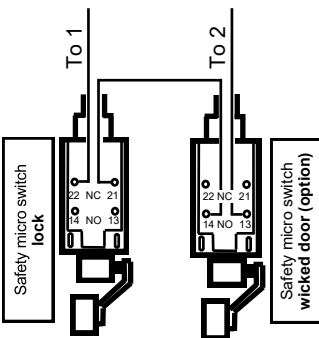
BP1 (inside view) and stop (outside view) have the same function.

Jumper delivered on AP.

3-button box (inside view)



To operator board (PIC 500)
Connector CM1



! If the microswitches are connected, move the red wire (terminal 2) to terminal 1.

Meaning of the L1 and L2 LEDs

When the board detects a **fault** the LEDs **L1** and **L2** remain **permanently on**.

Led	When?	Board status	Recommendations
Off	Board in normal operation	-	-
Flashes slowly	Board in self-learning (jumper on AP)	Limit switch learning in operation : Hold to run with electronic limit-switches <u>not active</u>. Pay attention to the end positions of the door (opening and closing).	Carry out self-learning (see chapter on Self-learning)
Flashes quickly		3 end position adjustment cycles in operation : Hold to run with electronic limit switches <u>active</u>.	
Fixed on "Defect"	Waiting for control (jumper on H or I)	Unset positions	Carry out self-learning (see chapter on Self-learning)
	At any time	Communication defect between the board and the encoder	Check the connection between the board and the encoder
	Launching A control	Supervision defect	Contact the after-sales service
	Self-learning (jumper on AP) when the door is moving	Encoder overcapacity defect	The operator/mechanical assembly is not adapted to the door, the encoder makes more than one turn.
	After an operator start in the wrong direction	Operator direction defect	Check the order of the supply phases (see chapter reversing the operator direction)

Warning



When LEDs L1 and L2 are flashing slowly, only hold to run operation without limit-switches is active.

Be careful as nothing will stop the door in the end positions (opening and closing).

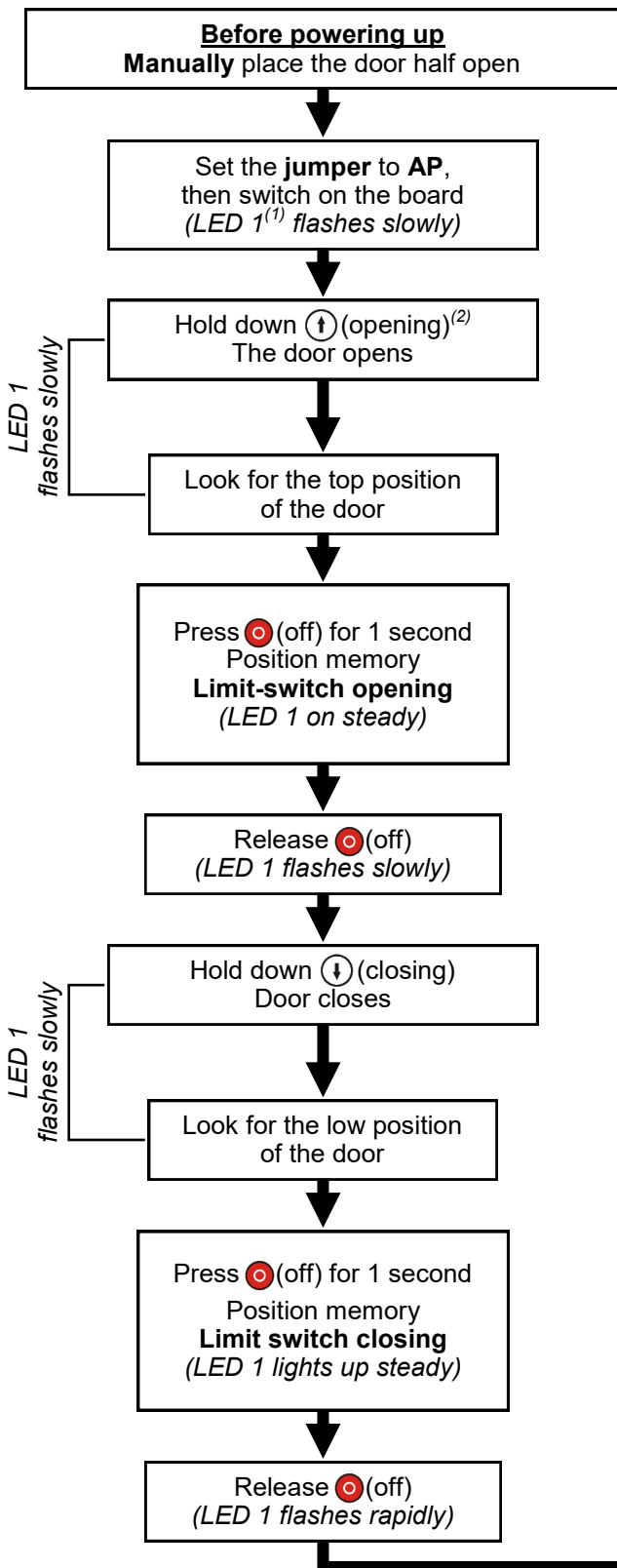


If you are using a board that has already been used on another door, you must repeat a self-learning procedure (see chapter on Self-learning) **before issuing a control**

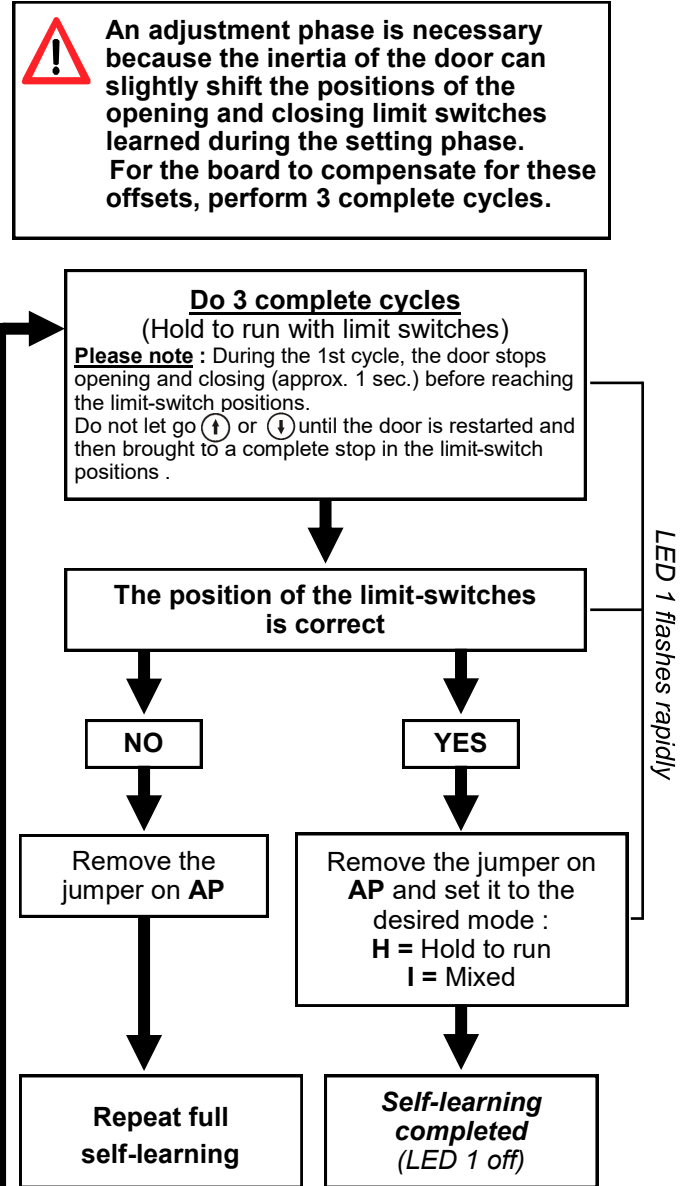
(the end positions of the limit switches are not set correctly).

Self-learning

Setting phase :



Adjustment phase :



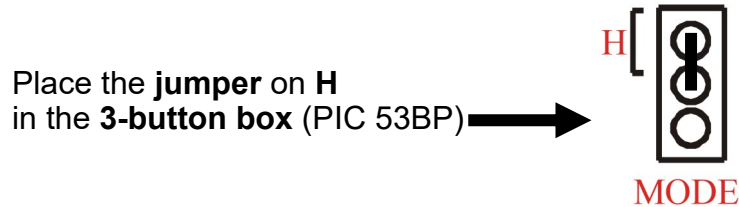
(1) If the LED L1 remains lit fixed after setting the jumper to AP, check the connection between the board and the encoder. If the problem persists, one of the cards may have an internal defect, please contact customer service.

(2) The door direction is automatically restored during self-learning (automatic detection).

Hold to run operation Sustained ascent/descent

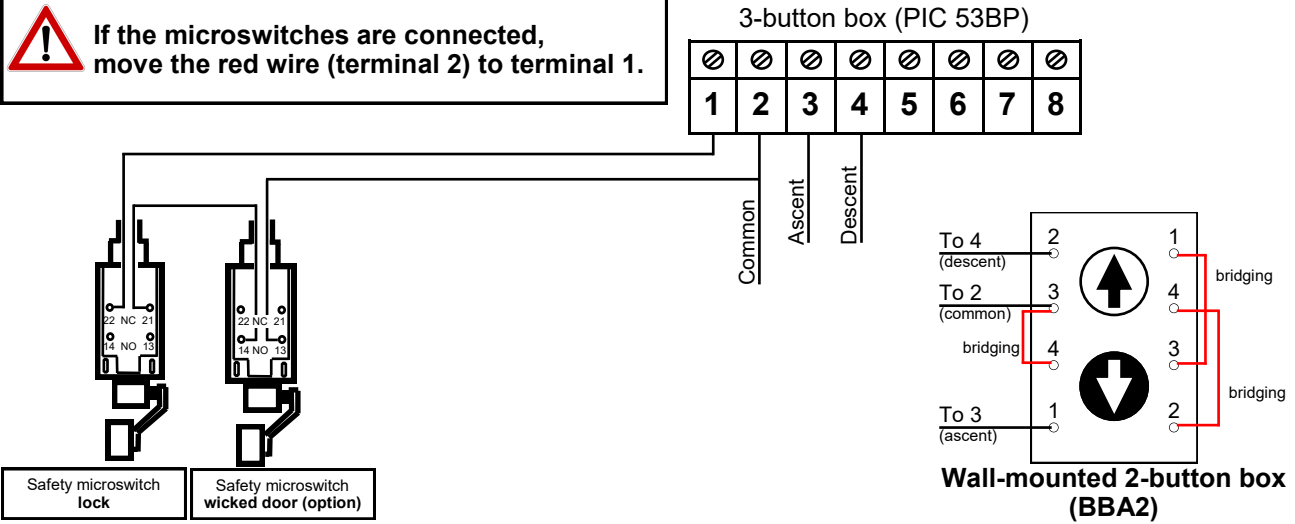
! The fixed controls must be installed within sight of the door but away from any moving parts and at a height of at least 1.5 m from the floor.

! Use one switch for a single operator. It is completely prohibited to control several operators with a single monopolar switch.



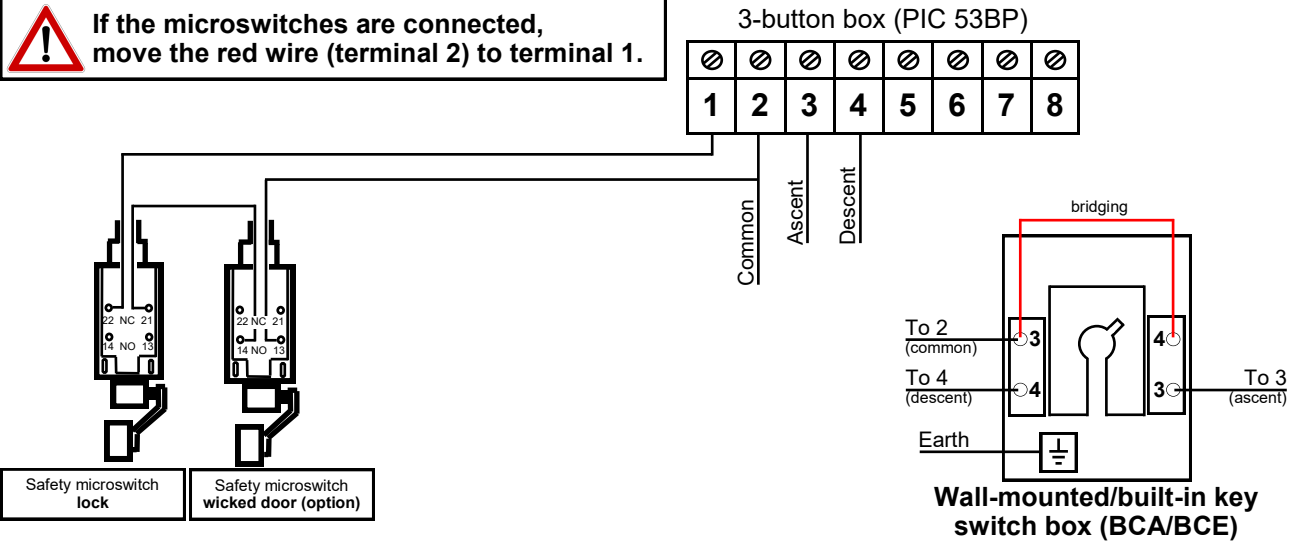
Connection of an additional 2-button box

! If the microswitches are connected, move the red wire (terminal 2) to terminal 1.



Connection of an extra key switch box

! If the microswitches are connected, move the red wire (terminal 2) to terminal 1.

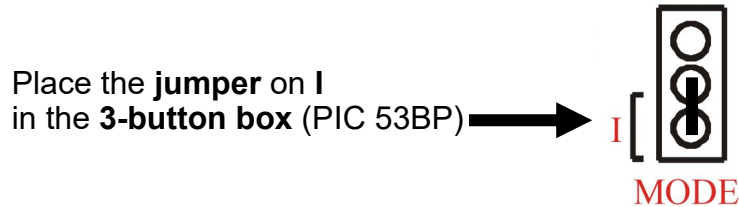


Combined operation

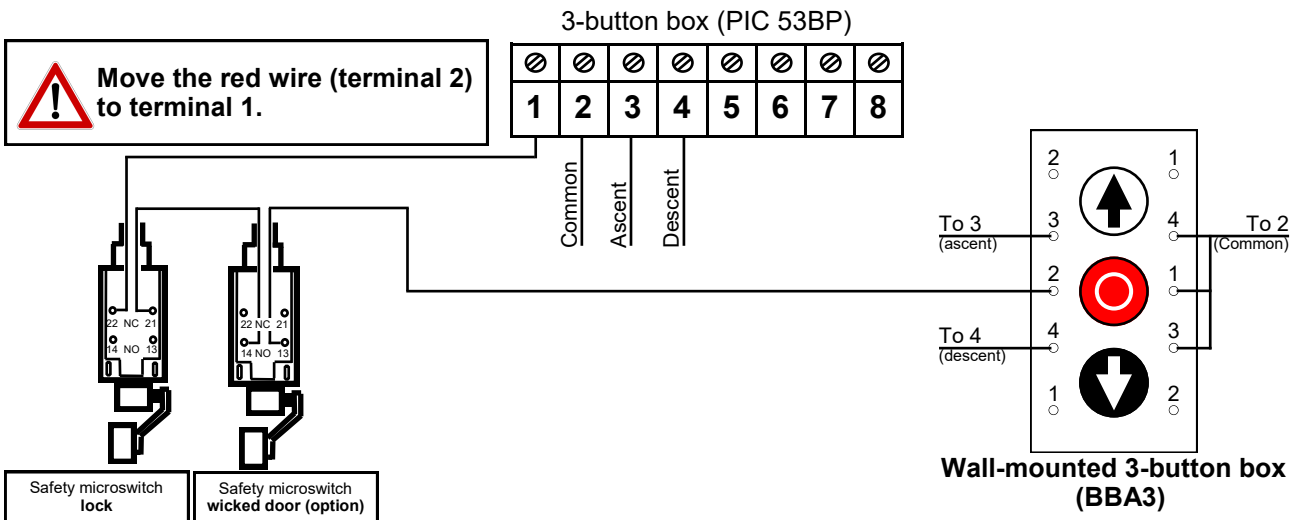
Pulse ascent - Hold to run descent

! The fixed controls must be installed within sight of the door but away from any moving parts and at a height of at least 1.5 m from the floor.

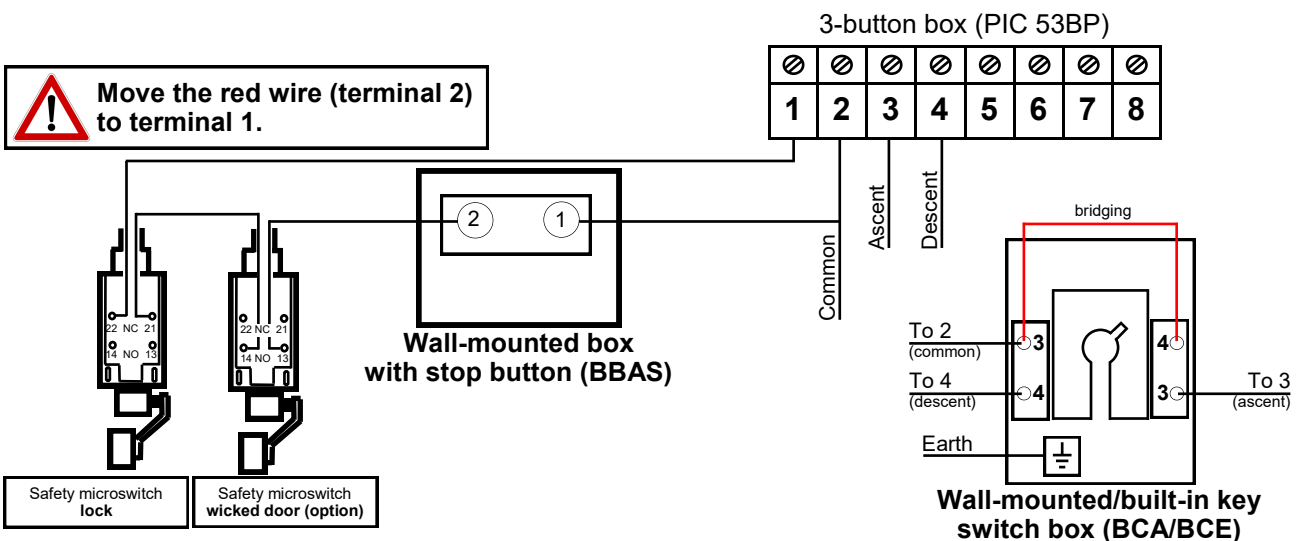
! Use one switch for a single operator. It is completely prohibited to control several operators with a single monopolar switch.



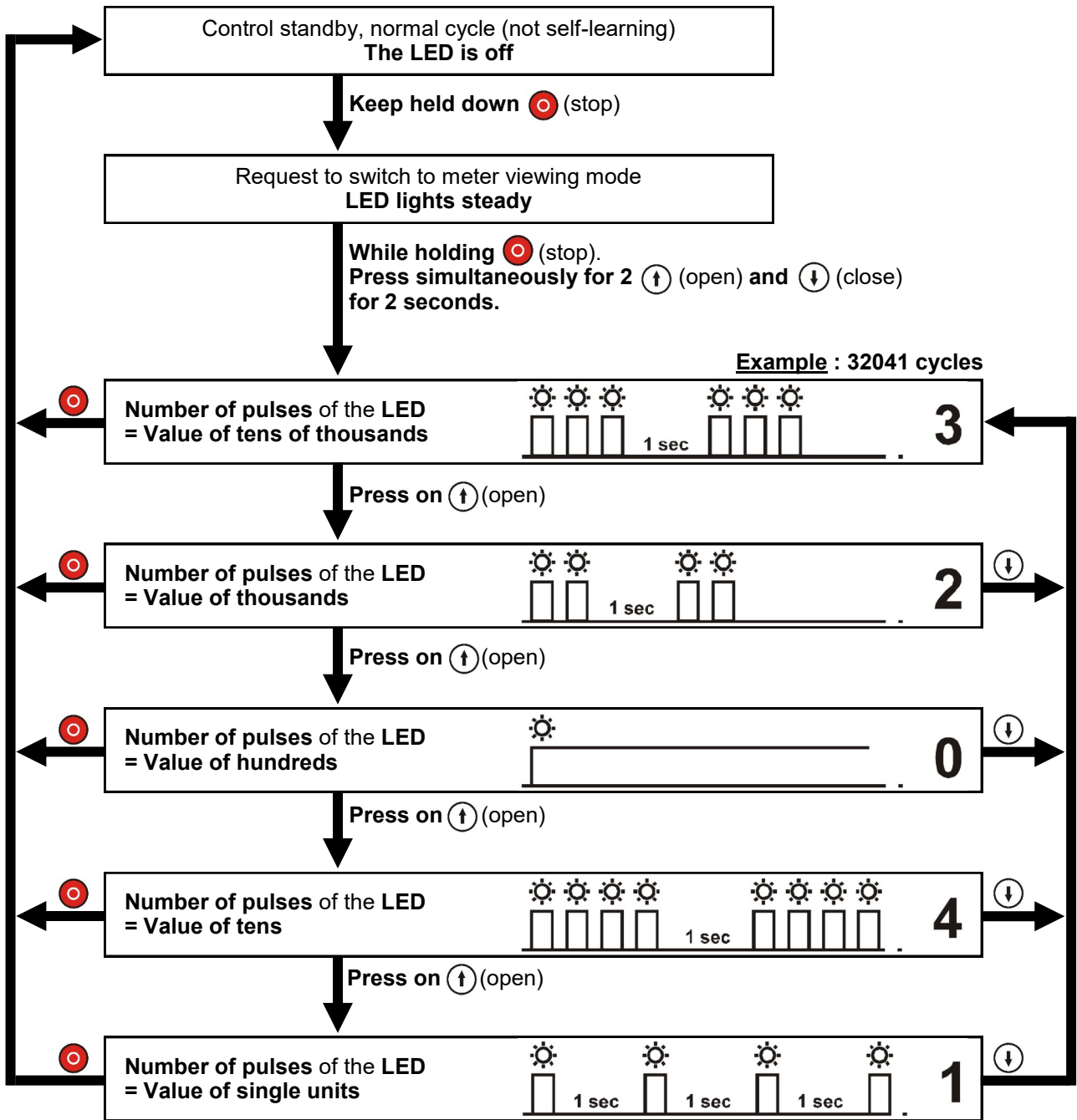
Connection of an additional 3-button box



Connecting a key switch box and an additional stop button box



Total counter cycle without reset



Please note :

- In counter display mode, the LED continuously shows the value of the digit to be displayed, lighting up according to the corresponding number of pulses (fixed lighting for value 0).
- If no action is taken for 1 minute, the board returns to normal cycle control standby.
- Maximum display 99,999 cycles.

In case of non-operation

- Check the supply voltage and the condition of any fuses.
- Check that the emergency operation control is not activated.
- Make sure that the operator is rotating in the correct direction, otherwise refer to the chapter on reversing the operator direction and carry out the steps.



Do not reverse the green (down) and brown (up) wires.

Emergency operation

Emergency help

➤ The door doesn't work

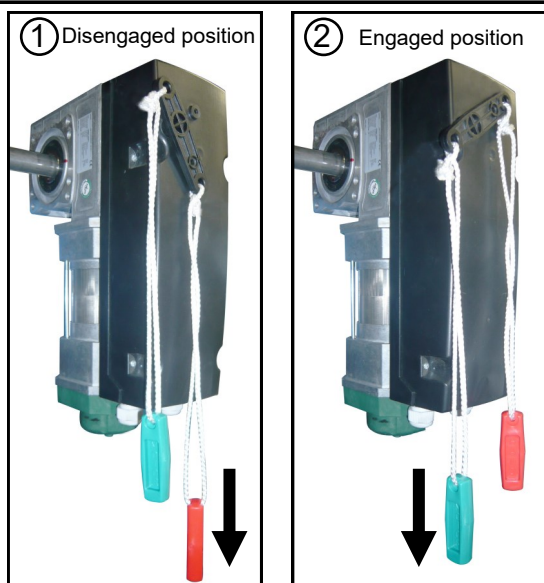
- Check the power supply and the fuses.
- If the operator has been used extensively, wait for it to cool down, the temperature sensor will reactivate automatically.
- If the operator has been used in emergency operation mode, check that the operator has been re-engaged.
- Contact your installer.

➤ The door stops while in operation

- Check the power supply and the fuses.
- Check that there is nothing blocking the shutters and that there are no rough spots that are hindering the shutter's movement.
- Contact your installer.

Emergency operation

- Pull the 1st cord (red) to disengage. ①
- You can then operate the door manually.
- After the emergency maneuver, pull the 2nd cord (green) to engage. ②



Customer service contact

(Installer's stamp)

