Control Box 2000 – 10A

Technical manual

SIREM

Product specifications

POOL COVER MOTOR CONTROL BOX

2000 Control Box – 10A

Change history		
Index	Description of the change	Date
00	Creation	07/07/25
01	Updates for switch to series	01/01/2026
02	Finalisation for official release	23/02/2026
03	Layout update and correction of Vaux voltage values	14/04/2026

Video tutorials

1. SAFETY INSTRUCTIONS

Installation is reserved for professionals

The installation, electrical connection and commissioning of the 2000 control box must be carried out by a qualified electrician, in accordance with the standards in force at the place of installation (NF C 15-100, NF EN 60335-1, NF P90-308).

Any intervention by an unqualified person carries the risk of electric shock or hardware damage.

The control box must be connected to:

- A residual current differential device (30mA)
- An all-pole circuit breaker with a point gap of 3 mm.

This product is not intended for use by children under 8 years old, persons whose physical, sensory or mental capacities are reduced, or persons without experience or knowledge, unless they have been given instructions & monitored previously when using the appliance by a person responsible for their safety.
Children should be supervised to ensure that they do not play with the appliance.

The person performing the manoeuvre must ensure in advance that no person, animal or obstacle is on or under the cover and always keep the pool in sight during opening or closing operations. Never move the cover without having a direct view of the pool.

It is essential to open or close the cover **completely**, and never leave it in the intermediate position.

Always check that the pool's water level remains constant and in compliance with the manufacturer's recommendations.

Any use not in accordance with this document may result in a refusal of warranty cover.

WARNING:

A swimming pool can be a serious danger for your children. Drowning can happen very quickly. Children near a swimming pool require your constant vigilance and active monitoring, even if they know how to swim.
The physical presence of a responsible adult is essential when the pool cover is open.

2. CONTENTS

3. DESCRIPTION OF THE 2000 CONTROL BOX

The 2000 control box is an electronic control box for pool covers, designed for quick installation and intuitive use.

It includes:

- Anti-tear protection
- The amperometric control
- Reduced motor speed during closing
- Smooth docking
- Relay outputs to control pool equipment (pump, electrolyser)
- Saved end stops in case of a power outage or a switch to MANUAL mode
- The possibility of going beyond the end stops without losing them, to access the skimmer for cleaning

The 2000 control box is programmed without a code or a complex menu: a single OK button is used to set the end stops. Simply follow the LED indicators and the quick installation guide to be guided through each step.

A **quick installation guide** is available behind the control box door

4. TECHNICAL DATA

Power supply	
Input supply voltage	230VAC
Tolerance on input voltage	±10%. Min.: 207VAC, Max.: 253VAC.
Power consumption in standby mode	5W, 80mA@230VAC.
Maximum power consumption	360W, 1.6A@230VAC (10A motor)
Connection	Spring terminals, max. cross-section 2.5mm², stripping length: 11 mm
Earthing	Mandatory for the safety of persons and equipment
Protection	5A fuse

Power supply for the motor	
Motor voltage	15 VDC min., 30 VDC max.
Maximum current	10A
Sensor board voltage	18Vdc – 30Vdc
Connection	Spring terminal max. cross-section 16mm², stripping length: 13 mm
Protection	20A fuse

Inputs	
Key Switch/Remote control receiver	2 inputs (opening and closing) Common: 24VDC. (Imax available: 160mA, protected by a resettable thermal fuse)
Key box contact type or remote control receiver	Dry contacts
Voltage	18VDC– 30VDC
Current consumed by the electronics	8mA per input
Connection	Spring terminal max. cross-section 2.5mm², stripping length: 11 mm

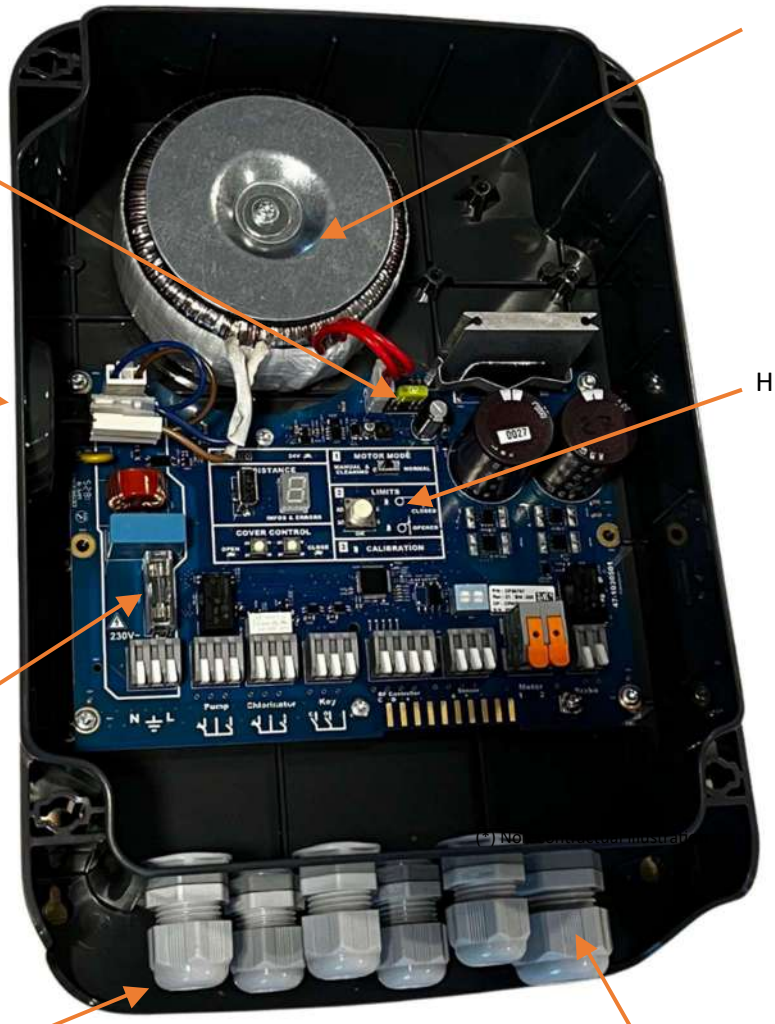
Outputs: 2 information relay switches	
Electrolyser control	NO/NC relay switch: "pool closed" dry contacts Breaking capacity 1A@250VAC, 1A@50VDC
Pump control	NO/NC relay switch: "motor running" dry contacts Breaking capacity 3A@250VAC, 3A@30VDC
Connection	Spring terminal max. cross-section 2.5mm², stripping length: 11 mm

Communication	
Power supply voltage	3.3V DC
Protocol	UART
Connection	USB-A connector specific to SIREM

Mechanics	
Dimensions H x L x D 	351 x 245 X 103mm
Weight	3.2 kg
Level of protection (according to EN 60529)	IPX5
Impact resistance	IK08
Operating temperature range	-10°C to +50°C
Storage temperature range	-15°C to +60°C
Humidity	95% max., no condensation

Regulatory	
CE	Certification
Compliance with European Directives (of the motor assembly and the control box)	Low voltage directive 2014/35/EU Machinery directive 2006/42/EC CEM directive 2014/30/EU RoHS Directive 2011/65/EU and 2015/863/EU
Resistance to environmental phenomena Immunity to electrical fast transients Immunity to shock-waves	EN 61000-4-4 Level 3 tests EN 61000-4-5 Level 3 tests

4.1. DESCRIPTION



4.1.1. COMPATIBLE MOTORS AND INSTALLATIONS

Type of submersible motor	Sensor logic	Compatibility with the 2000 Box
Coveo 120Nm	PNP	Yes
Coveo 140Nm	NPN	Yes
Coveo 200Nm	PNP	Yes
Coveo 300Nm	PNP	Yes
Motorisation >10A	-	No

The 2000 control box is **NOT COMPATIBLE with motors drawing more than 10 A** (Coveo IM300+, IM600, or others).

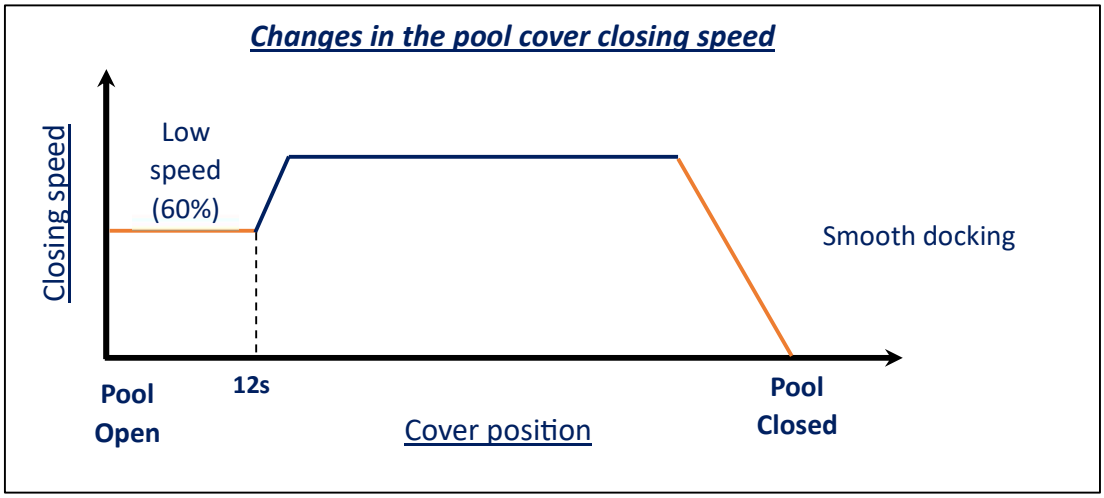
The 2000 control box is intended for submerged motor systems at a depth of **1 METER MAXIMUM**.

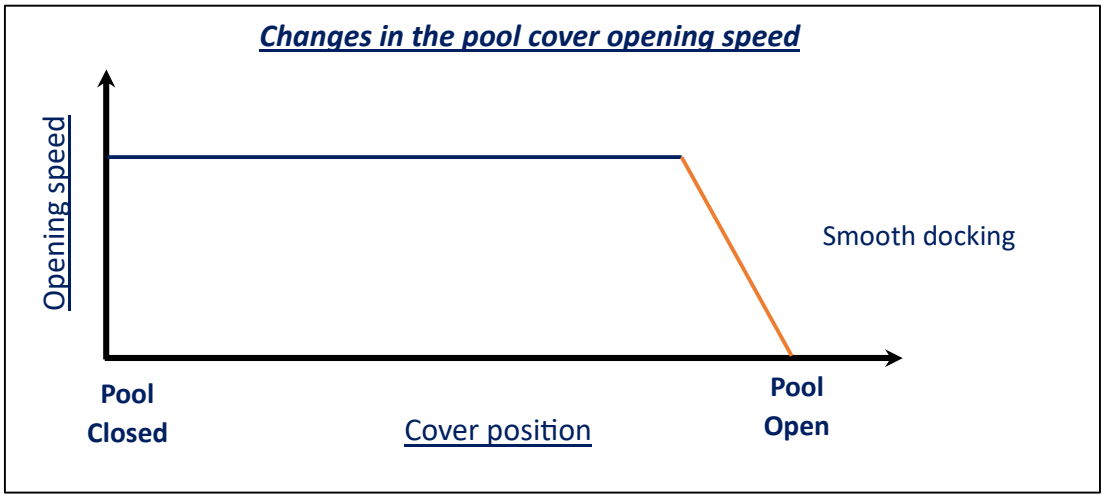
Depth (m)	Maximum Width (m)	Maximum Lenght (m)
0,5	7	12
1	4	8

These dimensions may vary depending on the installation configuration: type of slats used, type of shaft, type of mounting, etc.
If there is any doubt about compatibility with the 2000 control box, consult the manufacturer.

An "Error 5" is implemented to indicate, during setup and calibration, that the motor shaft is too deep and that the control box is not compatible with the installation. Refer to §9 for the procedure to follow if this error occurs.

4.1.2. SPEEDS PROFILE





5. INSTALLATION

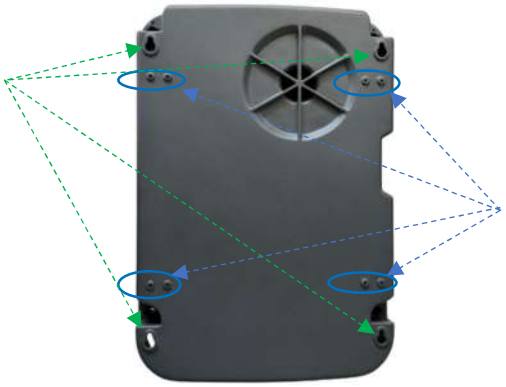
The installation of the control box must be carried out by qualified personnel, in accordance with the standards in force in the geographical area of installation.

The control box must be installed in a machine room that is frost-free, sheltered from the elements, any heat source and any spray hazard. The control box must remain accessible for any maintenance operation. Leave sufficient space around it for air to circulate (do not install it in a closed cupboard).

5.1. SECURING THE CONTROL BOX

The control box must be positioned with the cable glands at the bottom. This is a view of the back of the control box:

4 "lock" holes for standard control box mounting



Additional holes to be used if an old control box is being replaced - use the mounting brackets of the old box

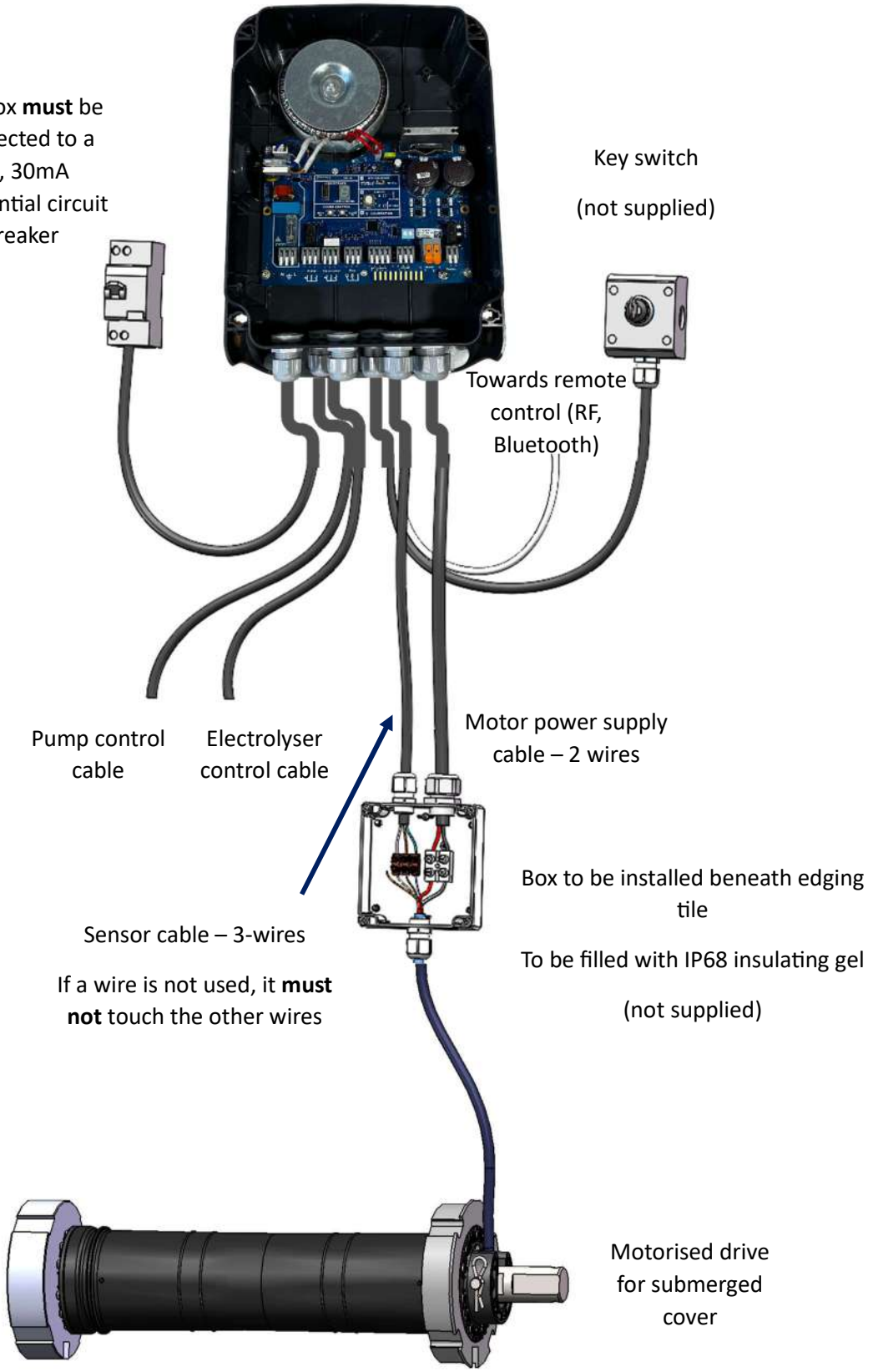
The control box must be on a support that is sufficiently solid to resist its weight.

1. Use the drilling template supplied to mark the position of the mounting holes.
2. Drill into the wall/support using the diameter indicated on the template.
3. Drive the supplied dowels into the holes.
4. Screw the 4 supplied screws into the dowels, leaving them protruding by about 5mm.
5. Place the control box on the screws, inserting them into the 4 lock holes on the control box and slowly lowering the control box onto them.
6. Tighten all the screws. We recommend not using an electric screwdriver but moderately tightening the screws using a suitable screwdriver.

When replacing a V2.2 control box, its mounting brackets can be recovered and used on the 2000 control box (holes available for this purpose)

The control box is closed using the 4 plastic screws **(1/4 turn)** on the cover. **DO NOT use an electric screwdriver**, it may damage the control box. We recommend using a suitable manual tool and tightening moderately.

5.1. INSTALLING THE SYSTEM



6. WIRING

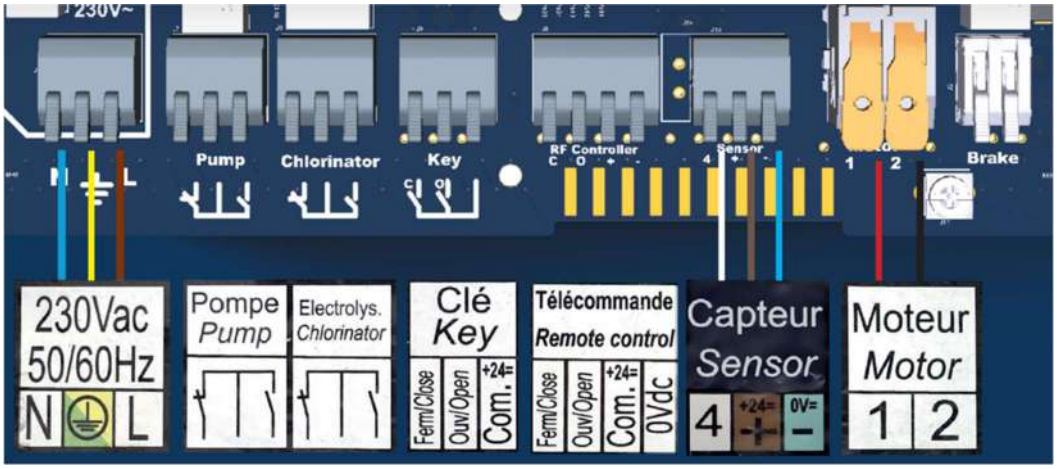
6.1.1. TERMINAL BLOCKS

The board is equipped with “spring” terminal blocks that do not require tools to connect/disconnect cables.

Before connecting them, check that the cables are free of defects.

To connect cables (preferably single-strand), in most cases it is sufficient to push the cable into the terminal block: No need to lift the lever.

- To disconnect a cable, life the terminal block lever



(*) Non-contractual illustration

After connecting them, **tighten the cable glands to ensure the box is watertight**.
We recommend **holding the cable** when tightening the cable glands**.**

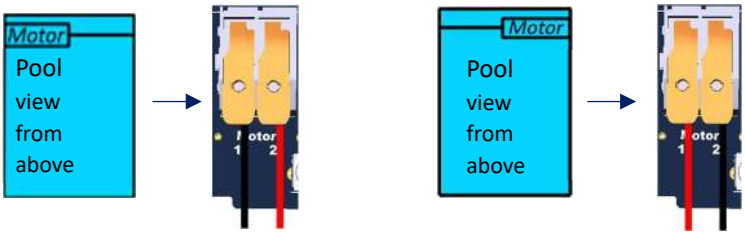
6.1.2. MOTOR WIRING

The control box is usually connected to the motor by two cables: a motor power supply cable and a cable for sensor signals.

The connection between these cables and the motor cable is made in a connection box installed beneath the edging tile. The seal is made when the power is disconnected by filling the connection box with gel (gel not supplied), see *chapter 5.1.*

The cover motor must be connected to the control box via the dedicated terminal block.

Installation direction:



The red and black wires of the motor are connected to the terminal blocks according to the position of the motor in the pool.

To guarantee sufficient speed for the motor, the voltage drop at full charge between the power supply box and the motor must not exceed 2 Volts. The motor power supply cable conductor cross-section must respect the cross-section recommendations according to the distance between the control box and the motor:

Coveo 120 Nm: (7A max)

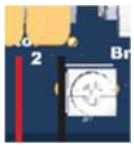
Motor-control box distance	2 m to 10 m	10 m to 20 m	20 m to 30 m	30 m to 50 m
Recommended cross-section	2.5 mm²	2.5 mm²	6 mm²	10 mm²

Coveo 200Nm and 300 Nm : (10A max)

Motor-control box distance	2 m to 10 m	10 m to 20 m	20 m to 30 m	30 m to 50 m
Recommended cross-section	2.5 mm²	4 mm²	6 mm²	10 mm²

These cross-sections are indicated in the case of maximum product consumption. The length can be increased if the consumption is lower (consult SIREM).

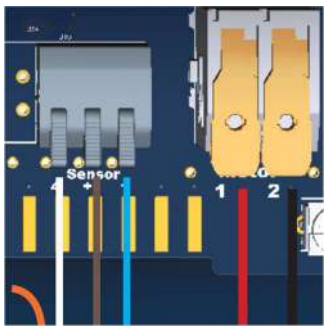
If the cable is shielded, connect it to the dedicated terminal (which is connected to Earth)



6.1.3. MOTOR SENSOR WIRING

For COVEO IM range motors, connect only the **white/brown/blue** wires to the "**Sensor**" terminal block.

Separate the remaining (orange) wire and insulate it.



It is preferable to use a shielded cable in order to protect the motor from atmospheric surges. This protection will only be effective if the shielding is connected to the dedicated terminal.

- Minimum cross-section of this cable's wires = **0.75mm²**

- Maximum cable length = **50m**

6.1.4. KEY SWITCH WIRING

A key switch MUST be connected to the control box via the “Key” terminal block.

Connect:

- The close contact to terminal **“C”** (CLOSE)
- The open contact to terminal **“O”** (OPEN)
- The common contact to the terminal on the right

Check these connections during programming (Chapter 8).

6.1.5. REMOTE CONTROL WIRING

A remote control (Radio, Bluetooth, etc.) can be connected to the “RF controller” terminal block.

Connect:

- The close contact to terminal **“C”** (CLOSE)
- The open contact to terminal **“O”** (OPEN)
- Power supply (Common and 24VDC) to the “**-**” and “**+**” terminals

6.1.6. WIRING THE POWER SUPPLY TO THE MAINS (230V)

The control box must be connected to the domestic network via a 4A, 30mA differential circuit breaker. (Not supplied).

(*) Non-contractual wire colours

The connection must be made via the dedicated terminal block:

- Neutral wire on terminal “**N**”
- Phase wire on terminal “**L**”
- Ground wire on the middle terminal

6.1.7. PUMP CONTACT WIRING

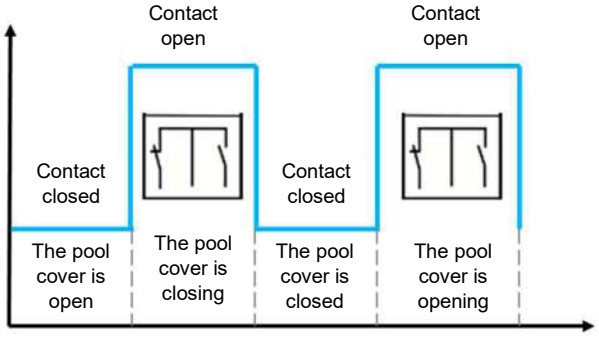
The control box allows the operation of a pump to be controlled according to the cover status, via a dry contact.

To do this, connect the pump control to the “Pump” terminal block.

The control box must not under any circumstances be used as a power supply for the pump.

Operation:

With a connection made to NO (Normally Open) as shown in the above image, the **Pump** contact operates as follows:



6.1.8. ELECTROLYSER WIRING

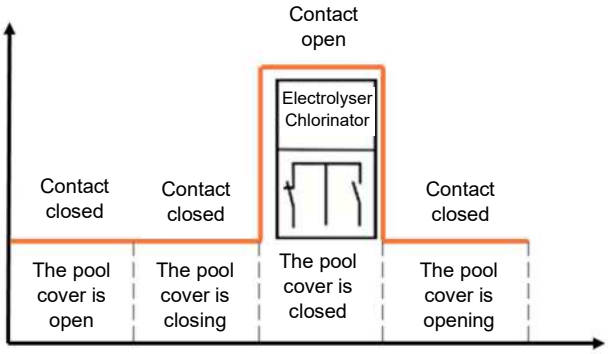
The box allows the operation of an electrolyser to be controlled according to the cover status, via a dry contact.

To do this, connect the electrolyser control to the “Chlorinator” terminal block.

The box must not under any circumstances be used as a power supply for the electrolyser.

Operation:

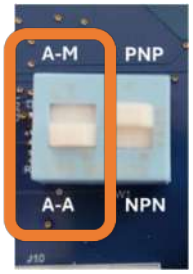
With a connection made to NO (Normally Open) as shown in the image, the **Chlorinator** (electrolyser) contact operates as follows:



7. SETTINGS

7.1. MOTOR CONTROL MODE SELECTION:

It is possible to select the motor control mode.



Select by toggling the dedicated switch **before powering up the control box.**

- **AUTO-MANUAL (A-M)**: Opening of the cover in impulse mode, closing in latched switch mode.
- **AUTO-AUTO (A-A)**: Opening and closing of the cover in impulse mode. This control mode is not authorised in France.

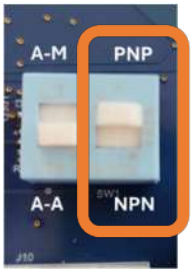
IMPORTANT

The AUTO-MANUAL mode (switch 1 **at the top**) is the **only mode authorised** in France

The AUTO-AUTO mode (switch 1 **at the bottom**) does not comply with the NF P90-308 standard and is prohibited in France

7.2. CHOICE OF PNP OR NPN MOTOR TYPE:

The control box can control COVEO IM motors with a **PNP or NPN sensor**.



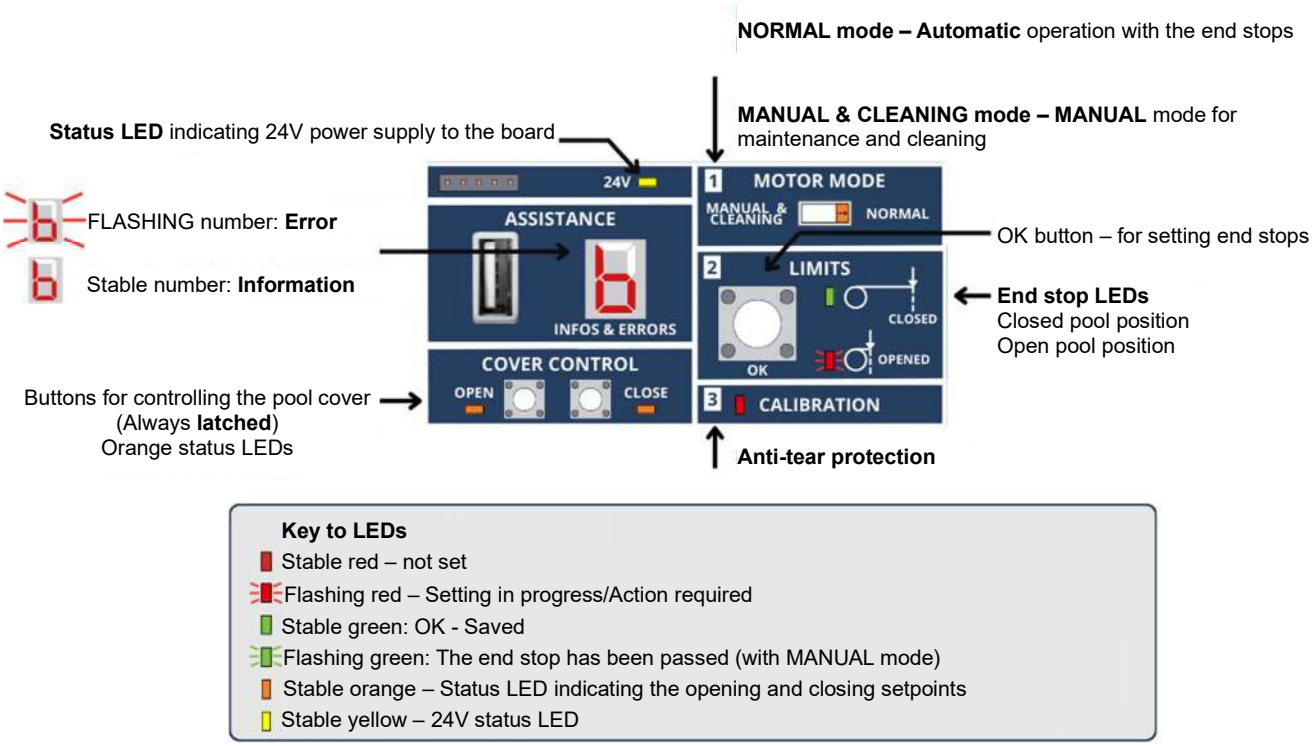
When the position of a switch is changed, **the control box must be rebooted**.

Most COVEO IM motors have a PNP sensor. If you are given no instruction from your pool cover supplier, **do not touch this switch**.

Changing the position of this switch and using the motor leads to the **loss of the end stops.** A settings procedure is **to be repeated.**

8. PROGRAMMING

8.1. EXPLANATION OF THE INTERFACE



Key to LEDs

- Stable red – not set
- Flashing red – Setting in progress/Action required
- Stable green: OK - Saved
- Flashing green: The end stop has been passed (with MANUAL mode)
- Stable orange – Status LED indicating the opening and closing setpoints
- Stable yellow – 24V status LED

8.2. SWITCHING ON THE CONTROL BOX

When the control BOX is switched on:

- All the LEDs come on for 1s in their available colours – The number 8 is displayed for 1s.

This allows you to check that all the visual components are in working order.

- Next, the software version appears on the display. It is in **X.X** format

Here is an example of the display sequence for ***version 2.3***:

8.3. LED STATUSES

When the box is first switched on, the LEDs in zones **2** **and** **3** are **RED** as shown in the following diagram: This means that **they have not been set**:

The other LEDs are status LEDs that indicate the current operating status.

Indicate the setpoint received by the control box (via the buttons or the key) – Light up

8.4. CHECKING THE WIRING

Once the wiring is complete, carry out the following protocol to check that the installation is working correctly:

1. In zone **1**. **MOTOR MODE**, turn the switch to **MANUAL & CLEANING**
2. Turn the key switch to **OPEN**. The pool should **OPEN**, no numbers should flash on the display.

If the pool **CLOSES**, check the key switch connection (chapter 6.1.4) and fix the wiring.

When the installation is operating in the right direction, you can install the cover on your pool.

Once the cover has been installed, the control box can be set.

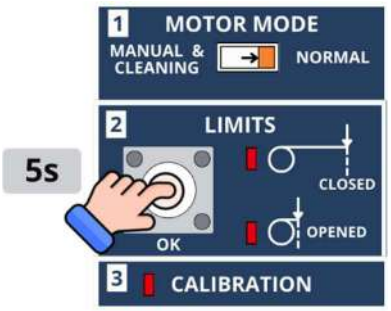
8.5. SETTING THE END STOPS

> Always start from the **CLOSED position**

Switch to **NORMAL** mode using the switch in zone 1 **MOTOR MODE**.

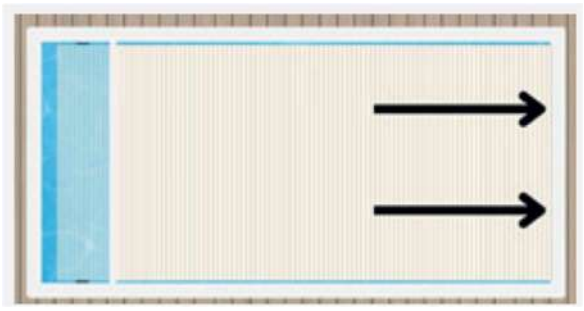
Then, use zone 2 **LIMITS**.

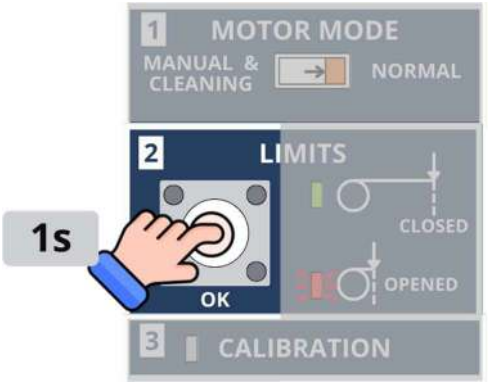
Press the **OK button** for 5 seconds to enter the end stop setting mode. The CLOSED LED will start flashing **RED**.



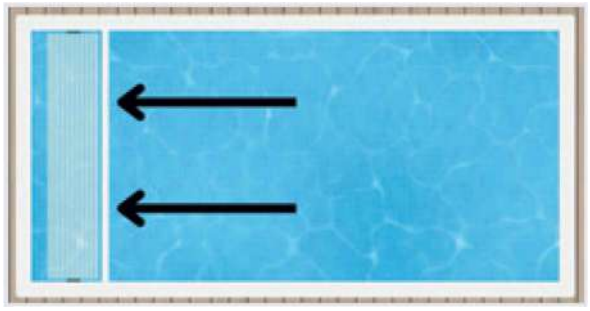
Use the key to move the cover to the CLOSED position and press the **OK button**. The CLOSED LED turns **GREEN**.

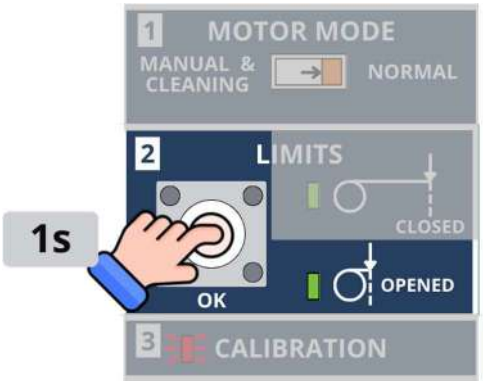
> It is essential that you start from the **CLOSED position**



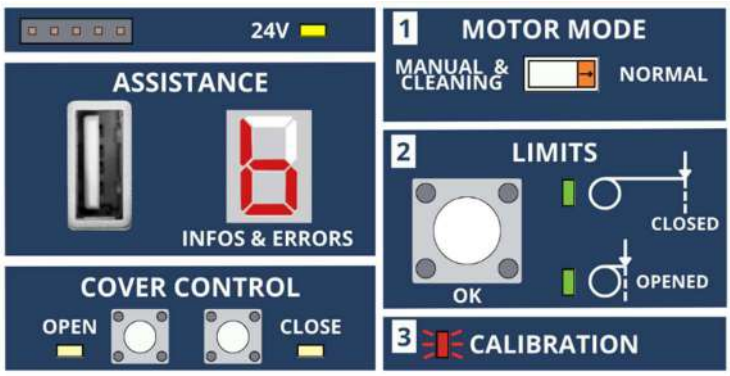


The **OPENED LED** will start **flashing RED**. Use the key to move the cover to the **OPEN** position and press the **OK button**. The **OPENED LED** turns **GREEN**





At the end of this step, the interface should look like this:



A stable number **6**: move on to the next step!

8.6. CALIBRATION OF THE INSTALLATION

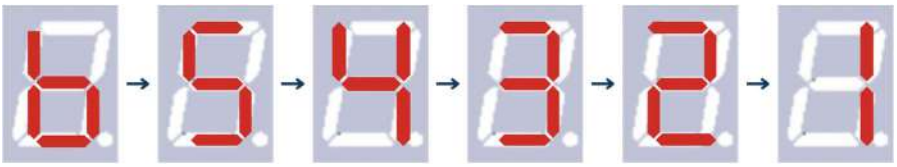
The 2000 control box includes **amperometric monitoring**, which also allows **anti-tear** protection (for example: straps forgotten or an object present in the pool when moving the cover).

The CALIBRATION step allows you to adjust the settings for this feature and ensure pool safety.

Once the end stops have been set, the **CALIBRATION LED** will start flashing **RED**

You must **OPEN** then **CLOSE** the cover completely 3 times (i.e. 6 back and forth movements) to ensure optimal protection of the installation.

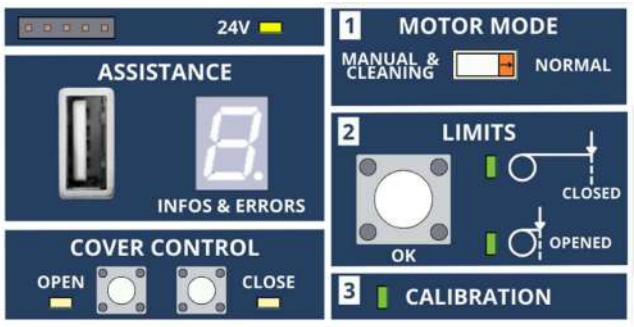
The display shows the number of **OUT or RETURN** movements remaining.



For precise measurement, the cover must **reach the end stops at every movement**.
DO NOT STOP THE COVER IF IT HAS NOT REACHED THE END STOP (except in an emergency).

Otherwise, you will have to restart the whole procedure for saving the end stops.

Once this is done, the **CALIBRATION LED** turns **GREEN** and the interface should look like this:



The control box has been set up correctly and is ready to be used!

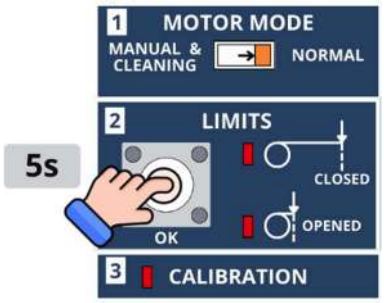
8.7. USE

8.7.1. RESET AND END STOP RESETTING

To reset the box and restart the end stop setting procedure:

- In zone 1 **MOTOR MODE** move the **SWITCH** to **NORMAL** mode
- In zone 2 **LIMITS** press down the **OK** button until the OPENED et CLOSED LEDs start flashing

The CLOSED and OPENED LEDs of zone 2 will turn **RED**



The procedures for **setting the end stops** (chapter 8.5) and for **calibration** (chapter 8.6) must be repeated

8.7.2. BACKUP OF THE END STOPS

The end stops are saved in the control box. In the event of a power outage or a switch to MANUAL & CLEANING mode, they are not lost.

Simply **power on the control box again** and switch to **NORMAL mode** so that they are applied again.

8.7.3. EXPLANATION OF THE CONTROL MODES

NORMAL: This mode allows the cover to be opened and closed with an automatic stop at the end stops.

MANUAL & CLEANING: This mode allows the cover to be opened and closed manually via the key, at low speed, without the end stops being taking into account.

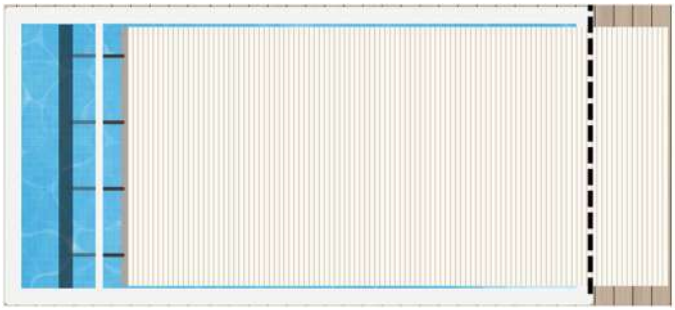
It is possible to go beyond the programmed end stops **without losing them**. Simply switch to NORMAL mode to find them again.

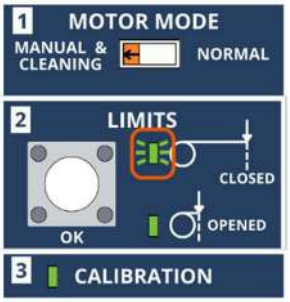
8.7.4. MAINTENANCE AND CLEANING OF THE POOL

It is possible to move the cover **beyond the end stops** in order to access the skimmer for cleaning. To do this:

In zone 1 **MOTOR MODE**, switch to **MANUAL & CLEANING**

Use the key switch or buttons in the **COVER CONTROL** zone to move the cover beyond the end stops.



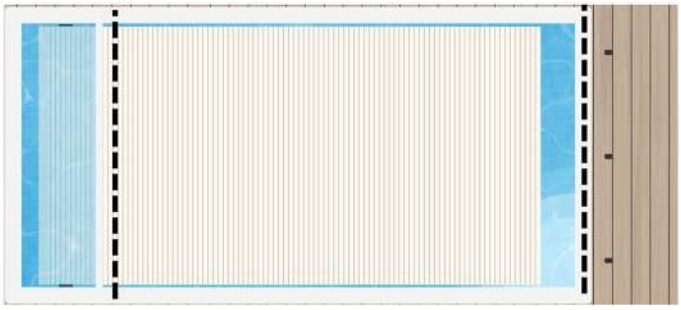


The LED of the end stop to be passed FLASHES GREEN if the position has been passed

To go back to NORMAL operation:

In zone 1 **MOTOR MODE**, switch to **NORMAL**

Use the key switch or the buttons in the **COVER CONTROL** area to reposition the cover **between the end stops**.



The LED returns to STABLE GREEN when the cover is back between the end stops

CAUTION

In **MANUAL & CLEANING** mode, there is no limit**.** Take care not to **damage the installation**

8.7.5. MAINTENANCE PORT

In the ASSISTANCE zone, there is a port intended for maintenance. Its specific connection allows **only one SIREM device** to be connected.

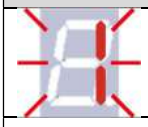
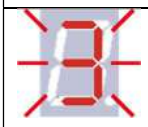
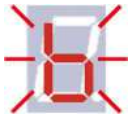
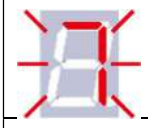
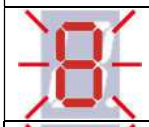
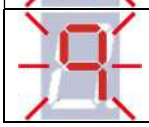
Do not connect any USB device (external battery, mobile phone, etc.) other than those authorised by SIREM.

8.7.6. CLEANING

If necessary, clean the control box with a dry or slightly damp cloth, without using any solvent or cleaning product.

9. ERRORS

In the event of an error, the control box will display a **FLASHING** number. If it is not a flashing number, it is not an error. To clear an error, you have to **RESTART THE CONTROL BOX**

Error N°	Meaning	Error correction
	**Faulty circuit board**	The control box is most likely defective and must be replaced.
	**Sensor error** Sensor signals are not reaching the control box	Check the wiring between the motor and the control box. Check the continuity of the motor output cable. **The control box can be used in MANUAL mode.** Procedure: - Restart the control box. - In zone 1, select the **MANUAL & CLEANING mode**. - Hold the key control in position until error 2 appears. The cover stops moving. Turning the key restarts the engine.
  	**Motor overload** leading to current that exceeds the authorised threshold: - **Error 3**: set calibre (10 A) exceeded. - **Error 6**: threshold defined during CALIBRATION in **CLOSING** exceeded. - **Error 7**: threshold defined during CALIBRATION in **OPENING** exceeded.	- Remove the cause of the overload and restart the control box. - If the fault reappears, reset again to start a new calibration. This fault is not blocking: two turns of the key clear the fault and restart the motor.
	**Power fault** on the electronic board	- Check the condition of the fuses → Change them if they are damaged (chapter 11) - Check that there is transformer output voltage If these elements are in good condition, the electronic board is probably damaged
	**Shaft too deep**	The cover shaft has been installed too deep for the pool dimensions. When the apron is pushed towards the surface, this generates a return current to the control box that is outside the tolerance range. → Install a box sized for this greater depth: 4020 or 4020 greater depth (contact your supplier).
	**Mains error**	Disturbance detected in the electric power supply (230 VAC)
	Motor not connected: the control box supplies the motor but no current is circulating	- Check the power supply wiring between the motor and the control box. - Ensure that the motor is connected correctly.

Online Help: https://www.sirem.fr/assistance-coffret-2000, or QR code

10. ACCESSORIES SUPPLIED WITH THE CONTROL BOX

The control box comes with:

- A quick installation guide inside the control box
- A bag of accessories including:
  - 4 ø6x30 dowels
  - 4 ø4.2x38 screws
- A drilling template

11. CHANGING FUSES

If necessary, replace fuses with fuses that have the same characteristics:

F1: Mini ATO fuse

F2: Fuse on 230V

For the mini ATO fuse, it is preferable to use a fuse puller to make extraction/insertion easier

For the F2 fuse (on 230V), activate the electrical separation device before changing.

Remove the plastic cover and replace the fuse.

Fuse characteristics	Calibre
F1 mini ATO fuse	20A
F2 ø5x20 glass fuse with time delay	5A

12. PACKAGING, PRODUCT MARKING

The box containing the control box is not suitable for single shipment. When shipping a control box, the box must be overpacked to preserve the integrity of the control box.

The control box has a label indicating its characteristics.

Product identification label affixed to the box comprising 2 detachable self-adhesive parts with:

- Serial number in bar code form
- Date of manufacture
- OF No. (xxxxxx)

The barcodes are in code 128 format, they include the product code (05.0001.4xxx) followed by a unique number.

13. WARRANTY TERMS

The warranty only applies subject to compliance with the following conditions:

- The installation has been carried out by a **qualified professional**, according to the applicable standards (NF C 15-100, NF EN 60335-1, NF P90-308).
- The control box is used **with a compatible motor drive (≤10A)** and according to the instructions in the manual.
- No component of the control box has been modified or opened by an unauthorised person.
- The connections, programming and calibration have been carried out in accordance with the recommendations in this technical manual.

13.1. WARRANTY EXCLUSIONS:

The warranty does not cover the following cases:

- Installation that does not comply with the manufacturer's recommendations or the regulations in force.
- Damage caused by external events such as a power surge, lightning or power grid disruptions.
- Damage resulting from immersion, exposure to excessive humidity, frost or a mechanical impact.
- Use with a motor drive greater than 10A, not included in the instructions of the manual or with accessories that have not been approved by the manufacturer.
- Incorrect or non compliant wiring, particularly in the case of insufficient cable cross-section.
- Connection, addition or modification of devices not expressly approved by the manufacturer.
- Modification, dismantling or alteration of the control box, the electronic board or the safety devices.
- Any intervention, repair or modification carried out by an unauthorised person.