Quick troubleshooting guide

DEL

Troubleshooting on in-ground tubular motor 120/250/500/750 NM with electronic limit switches Control box MIT1210/MIT3210/MIT5210/MIT7210 /DL6010 / DL7710

ROLLINSIDE / ROLLENERGY / CONTURA with MIT MOTOR

CF.GROUP FRANCE

SUMMARY

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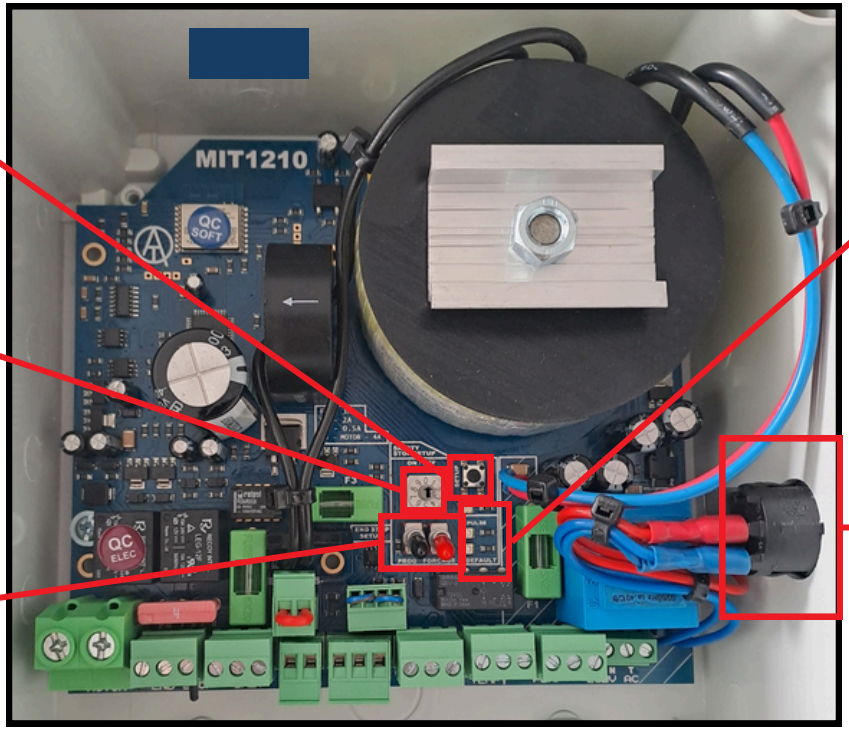
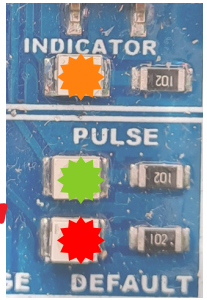
The operations described in this guide must be performed by a professional with appropriate electrical authorization (in accordance with applicable standards).

MIT CONTROL BOX





RESET switch

Potentiometer

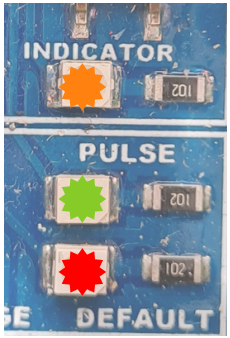
Toggle switches

PROGRAMME

FORÇAGE

ON/OFF switch

MIT CONTROL BOX: MEANING OF THE LEDS



INDICATOR: motor overload warning light

Off => Overload control disabled

Fixed => Overload control enabled

Flashing => Overload detected

PULSE: sensor indicator

Off => Sensor open

Fixed => Sensor closed

Flashing => Sensor return when cover in operation

DEFAULT: electronic fault indicator

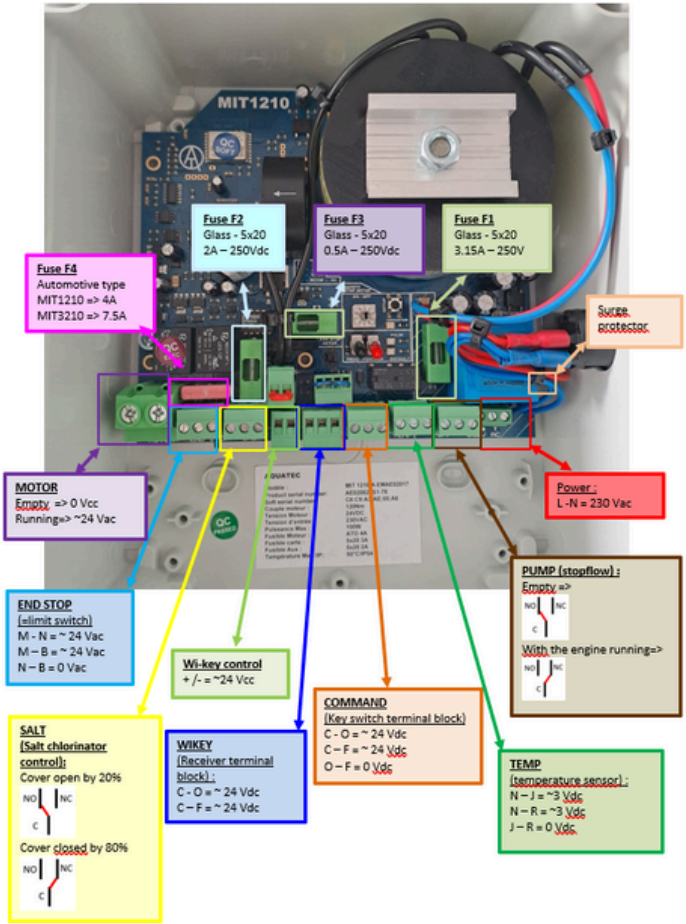
Off => No fault

Fixed => Sensor fault

Flashing => Short- circuit

Fixed: Factory setting => reprogram the limit switches

MIT ELECTRICAL BOX: CHECKING THE VOLTAGES



MOST FREQUENTLY ENCOUNTERED PROBLEMS

Refer to the table below for each malfunction.
Perform each related action one after the other until you find the faulty point, allowing you to resolve the problem.
Beforehand, you must have checked that the box is properly powered (L/N/Earth terminal block) and have checked and replaced the fuses if necessary.

TROUBLESHOOTING	ACTION TO BE CARRIED OUT					
	A	B	C	D	E	F
The motor does not run/no longer runs.	X	X	X	X	X	
The motor runs in reverse.		X				X
The motor only turns in one direction.		X			X	X
The motor is slow or noisy.	X					

Necessary tools:

The multimeter must be able to measure direct current:

Symbol ⎓

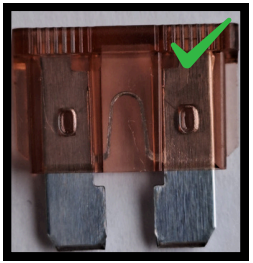
Multimeter

Screwdriver

5-10cm cable

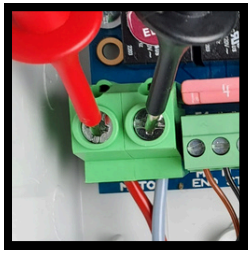
A/ Check the motor power circuit

1/ Check the continuity of the fuses (position on multimeter: )


If the fuse is defective, replace it after checking the continuity of the new fuse.

2/ Set the FORCAGE lever cursors to ON and PROGRAM to OFF. Carry out an opening or closing via the control system then measure the DC voltage on the MOTOR terminal block.

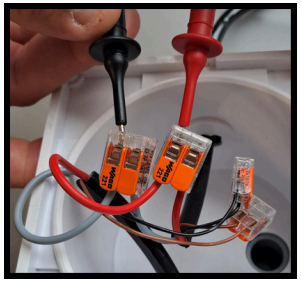



If the voltage is at zero, check the operation of the control via step F and B, and carry out the measurement again.

A/ Check the engine power circuit

CAUTION: all voltage measurements in the junction box must be made on clean, non-oxidised wires, failing which the wires must be recut.

3/ Disconnect the two red and grey wires from the motor cable then take the DC voltage on the 2 power wires coming from the box in the junction box.
It should be between 27-30VDC.

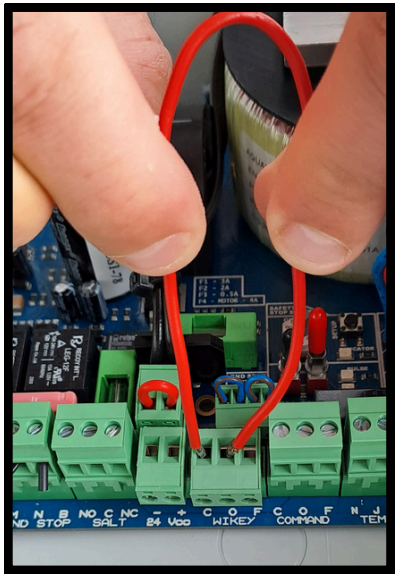


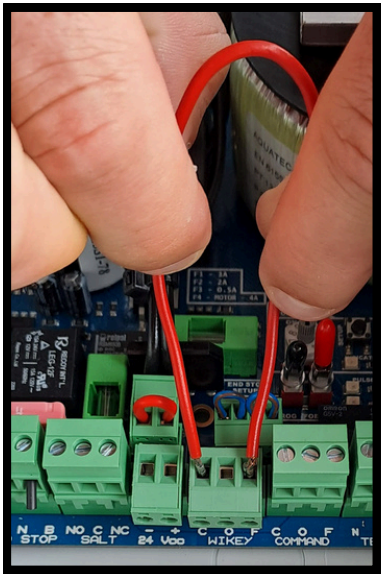
If the tension is zero, replace the power cable between the box and the connection box.

If the tension is correct, the motor power is therefore defective: replace the motor.

B/ Short-circuit the control

For the connector, whether WIKEY or COMMAND, make a bridge between terminals C and O or between terminals C and F.



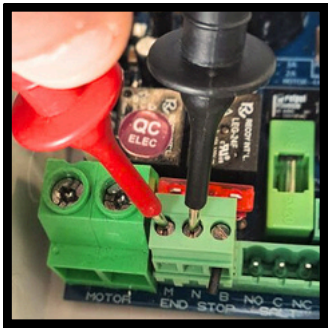


C = Common
O = Opening
F = Close (Fermeture)

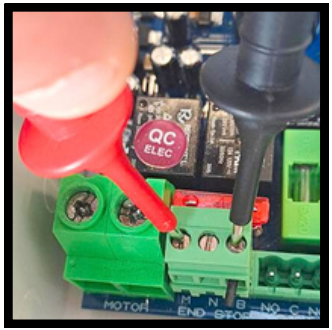
If the installation works with the bridge, check and/or replace the control system (key switch or Wi-key) and/or the cable between the box and the key switch.

C / Check the limit switch circuit

1 Set the FORCAGE lever cursors to ON and PROGRAM to OFF.
Measure the voltage at the box on the END STOP terminal block disconnected wires between the terminals as below:



M - N => around 24VDC



M - B => around 24VDC

N - B => around 0VDC

If the voltages are different, the internal circuit of the control box is faulty. It is necessary to replace the control box.

2 Make a bridge on the END STOP terminal block between M and N. The green PULSE LED should light up for 2 seconds then go out.

If no LED lights up, the electronic limit switch circuit is faulty. The box needs to be replaced.

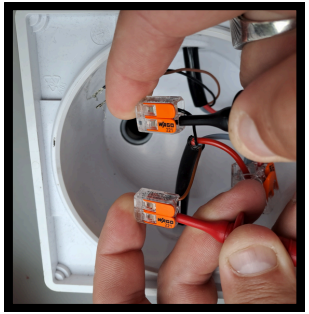
C / Check the limit switches circuit

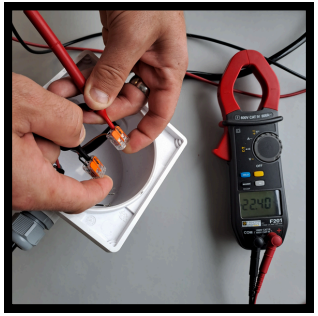
CAUTION: all voltage measurements in the junction box must be made on clean, non-oxidised wires, failing which the wires must be recut.

3 Reconnect the sensor wires in the box then disconnect the motor sensors (brown and black wires) in the junction box.

Measure the voltage at the wires connected to the END STOP terminal block coming from the box.
It should be between 22-24VDC.

If the test fails, the damaged cable will need to be replaced.

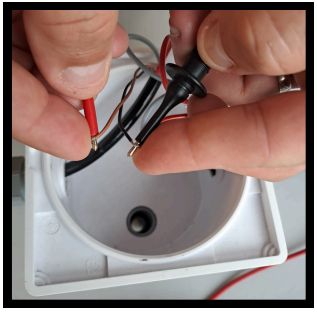




C / Check the limit switches circuit

4 Check the continuity (position on the multimeter:) of the motor sensor by testing the small brown and black wires while the motoris running.
You should hear an alternating beep.

If the beep is continuous or absent, it means that the internal motor sensor is faulty. It is therefore necessary to replace the motor.



D/ Program the limit switches

1.To save the starting reference, put the cover in the **open position**. Use force mode if necessary by turning the "FORCAGE" switch to ON.

2. Return the "FORCAGE" switch to OFF.

3. Turn the "PROG" switch to ON.

4. Unroll the cover while holding the switch in the "**Closed" position** (if the engine does not start, the "DEFAULT" light (red LED) is not on and the switch wiring is correct, reverse the wires of the motor).

5. Release the switch when the pool is completely covered.

6. If necessary, go backwards (switch in Open position), followed by a closing.

7. Return the "PROG" switch to "OFF".

E / Short circuit: search for the faulty element (red FAULT light flashing)

A short circuit is identified by a flashing red fault indicator.

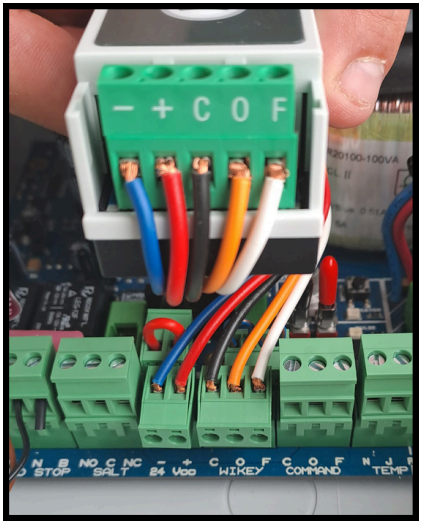
To detect the short-circuited element, it is necessary:

- to turn off the box,
- disconnect external cables
- reconnect the parts to be tested one by one, then turn the box on again at each following step in the order indicated:
    - Command (key switch, Wi-key...)
    - Motor power
    - Limit switches
    - Salt chlorinator control
    - Filtration pump control

As soon as the red light is flashing, the previously connected part is the cause of the short circuit and is faulty.

F/ Check the control and motor wiring

Check the correspondence of the wires between the -/+/C/O/F terminal blocks of the control system and the control box.



If you come across any inconsistencies, please rewire according to the image provided above.

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If you are unable to solve the issue, please reach out to our Technical Support Department.

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