



NIVA 3



RNS 1-2

RNS-1, RNS-2 and NIVA 3 Module

level regulation module

Réf : PF10L006 / PF10L002 / PF10L009

Table des matières

1. Technical specifications	2
2. Pack contents	3
3. Installation	3
3.1. Connection to electricity	3
4. Device operation - function description	6
4.1. Available features (depending on the version)	6
5. Installing the accessories	7
5.1. MFP-2 floater (RNS-1)	7
5.2. SE-3 sensor (RNS-2)	7
5.3. SE-1 sensors (Niva-3)	8
A. Declaration of conformity	8



Read these instructions carefully before installing, commissioning and using this product

1. Technical specifications

Power supply voltage	230V AC - 50Hz
Dimensions:	220 x 200 x 150 mm
Protection factor	IP-55
Level sensor	Depending on the model: <ul style="list-style-type: none">• 1 MFP2 (SF140008) floater = RNS-1• 1 SE-3 (SF140005) sensor = RNS-2• 3 SE-1 (SF140017) sensors = NIVA-3
Outputs	1 24V AC - 6VA output for solenoid 1 dry contact output to manage pump prohibition



Forced operation output and corresponding indicator
RNS-1, RNS-2 and NIVA 3 Module



not active on

2. Pack contents

1 module RNS-1, RNS-2 and NIVA 3 Module	1 screen filter (max pressure 4 bars)
1 24V solenoid	1 Technical manual (this document)
1 level sensor (different depending on the model)	

3. Installation

3.1. Connection to electricity

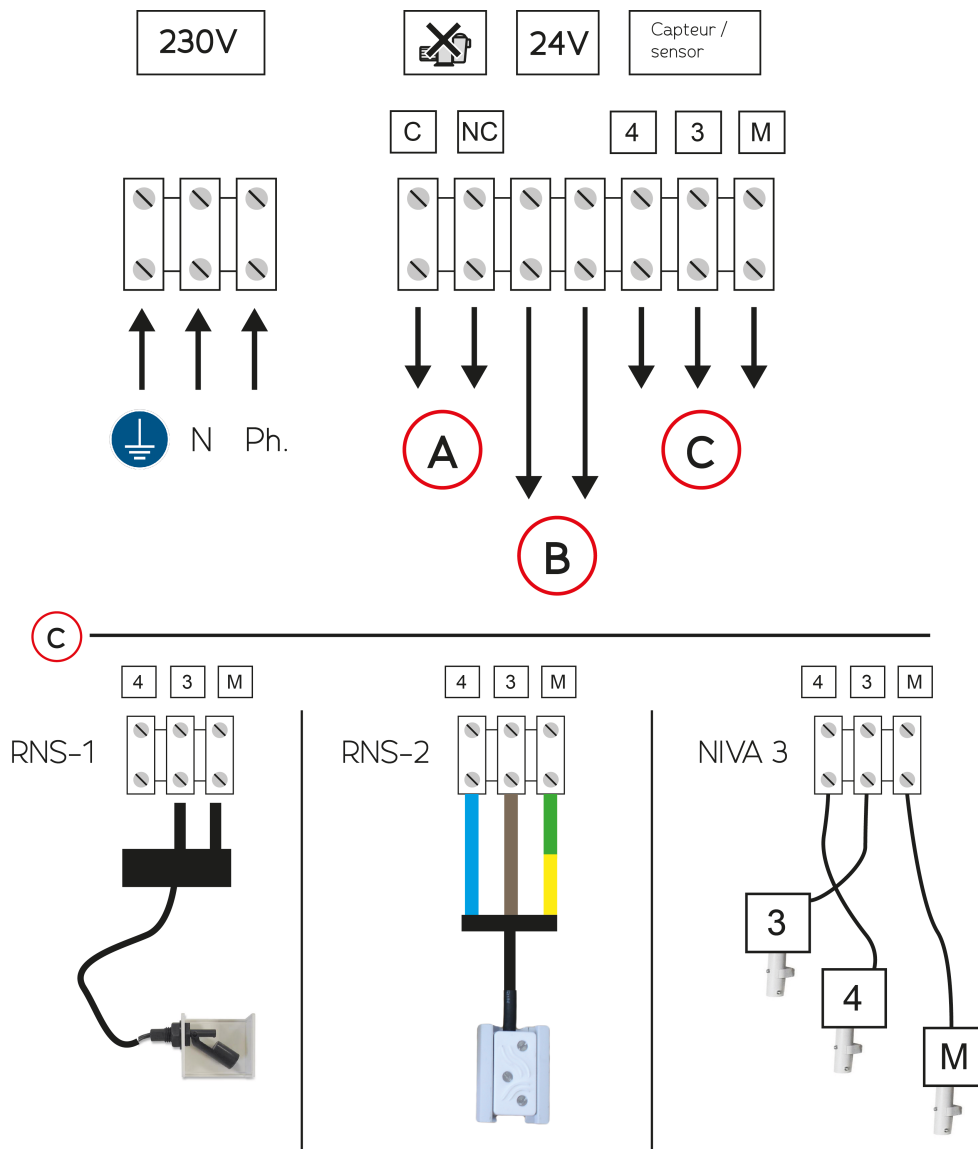


Installation of this project involves a hazard of electric shocks. We strongly recommend you contract a professional installer. Incorrect installation places you in danger and may irreversibly damage the product and the equipment connected to it.



For safety reasons and in compliance with the NF C15-100 standard, the box in which the RNS-1, RNS-2 and NIVA 3 Module is installed must be

- either at 3.50 m from the pool edge. This distance takes into account the distance around obstacles. If the RNS-1, RNS-2 and NIVA 3 Module control box is installed behind a wall, the distance will include the length of the path taken to move around the wall to reach the box.
- or in an in-ground space immediately next to the swimming pool. In this case the space must be accessible via a hatch which requires a tool to open it.
- downstream of a high sensitivity ground fault protection (30mA) in compliance with the NF C15-100 standard



- A. Pump prohibition (see below for more details)
- B. 24V output for solenoid
- C. Level sensor connection supplied with the box.

The connection differs depending on the level sensor being used. The lower part of the image (C) describes the possible connections.

3.1.1. Pump prohibition connection

3.1.1.1. To a CCEI brand electric box

The electric boxes manufactured by CCEI are fitted with a pre-connected terminal block marked ABCD for automatic level regulators.

- **A and B:** filtration pump forced operation (not used for RNS-1, RNS-2 and NIVA 3 Module)
- **C and D:** pump prohibition

All that remains to do is to remove the "shunt" between C and D on the filtration box and to connect the 2 wires from the "Pump prohibition" output of the RNS-1, RNS-2 and NIVA 3 Module box instead.

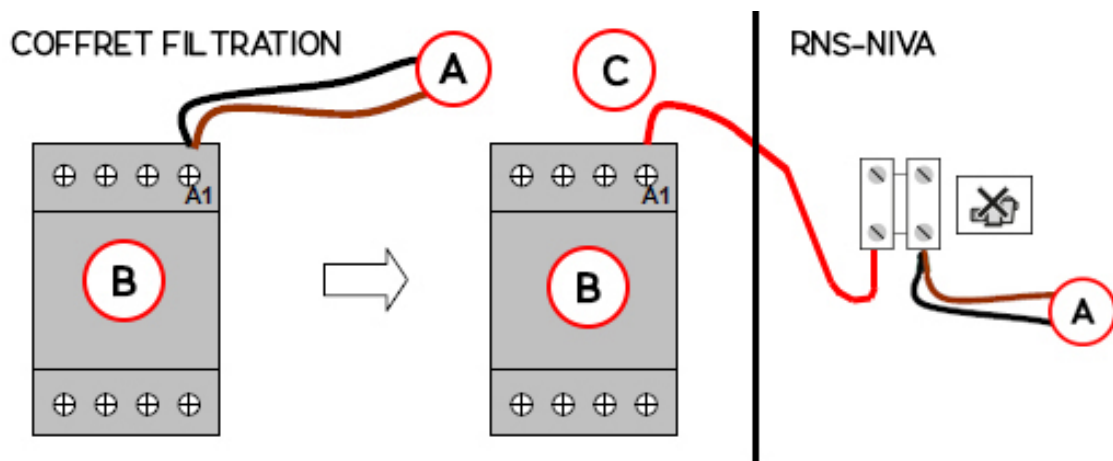
3.1.1.2. On a standard electric box

If the electric box is not pre-fitted for automatic level regulation, connect directly to the filtration contact . The following information is given as an indication only. It is imperative to follow the instructions for your pool electric box or to first contact your box manufacturer.

Pump prohibition:

Connect the Pump prohibition terminal block to terminal block A1 on the filtration contact

- **A:** existing wires in the filtration box
- **B:** filtration contact installed in the box
- **C:** wire to add to connect the pump prohibition to the box RNS-1, RNS-2 and NIVA 3 Module



Disconnect the wire or wires arriving on the A1 terminal block from the filtration contact and send them to a terminal on the "Pump prohibition" screw terminal on the RNS-1, RNS-2 and NIVA 3 Module box. Then use another wire to connect the other "Pump prohibition" screw terminal to terminal A1 on the filtration contact.

4. Device operation - function description

4.1. Available features (depending on the version)

4.1.1. Timer

In order to make the system insensitive to lapping water, the electronic system times level change detection. The system only opens the filling solenoid when the detected level remains below the threshold for 10 seconds.

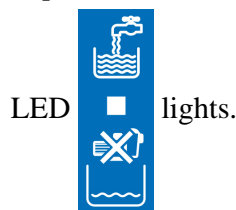
Similarly, the solenoid will close when the level has stabilised over the threshold for 5 seconds.

4.1.2. Pump prohibition output

The RNS-1, RNS-2 and NIVA 3 Module has a Pump prohibition output that is used to prevent the pump from running if there is not enough water.


4.1.3. Filling solenoid output

Using this output, the RNS-1, RNS-2 and NIVA 3 Module sends alternating 24V when filling is required. Connect this output to the solenoid supplied with the module. When filling is active, the



4.1.3.1. Filling fault

If the high level is not reached after 3 hours, the box switches to monitoring mode for 30 minutes


and the indicator  lights orange (green + red LEDs). After 30 minutes, if the level has still not been reached, filling is cut and the pump prohibition remains active as a safety measure. The

indicator  switches to red.

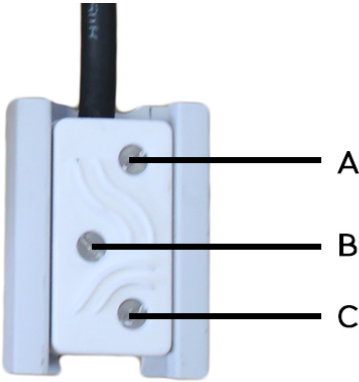
In this situation, check the level sensor and the filling solenoid. Turn the device off and on again to reset the fault.

5. Installing the accessories

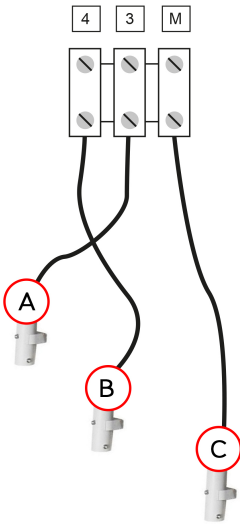
5.1. MFP-2 floater (RNS-1)

	<p>The MFP-2 floater is fixed in the skimmer. Preferably use silicone or neoprene adhesive and make sure not to block the removal of the filtering basket.</p> <p>A. Floater</p> <p>The device acts as an "on-off" switch. The floater height varies with the water level and when it is below the horizontal position (as in the photo for example), it activates filling and pump prohibition.</p> <p>Once the level has been reached, the device stops filling and restarts the filtration pump.</p>
---	---



5.2. SE-3 sensor (RNS-2)

	<p>The SE-3 sensor is fixed in the skimmer. Preferably use silicone or neoprene adhesive.</p> <p>A. High level B. Low level C. Ref. level</p> <p>If the water level is above the high level (A), filtration is authorised and automatic filling is stopped.</p> <p>If the water level is below the low level (B), the device stops filtration (pump prohibition) and activates filling until the high level is reached (A).</p>
---	---

5.3. SE-1 sensors (Niva-3)

	<p>The 3 SE-3 sensors are placed in the skimmer, separately from each other. We recommend installing them in a channel or a PVC pipe to isolate them from the wall and keep them separate. The sensors must be fixed at the required height to prevent them from moving and avoid any pull on their wire. The sensor wires must be guided so that they do not tangle.</p> <p>A. High level (to connect to terminal 3) B. Low level (to connect to terminal 4) C. Ref. level (to connect to terminal M)</p> <p>If the water level is above the high level (A), filtration is authorised and automatic filling is stopped.</p> <p>If the water level is below the low level (B), the device stops filtration (pump prohibition) and activates filling until the high level is reached (A), or stops after 3 hours (see Fault section)</p>
---	--

A. Declaration of conformity

<p>CCEI S.A.S (FR 47 40 35 21 693) declares that product RNS-1, RNS-2 and NIVA 3 Module is compliant with the safety and electromagnetic compatibility requirements of European directives E.M.C (2014/30/UE), Low voltage (2014/35/UE), RoHS (2011/65/UE), WEEE (2002/96/CE) and REACH (1907/2006).</p>		
		<p>Emmanuel Baret Marseille, on 02/01/2020</p>
<p>Distributor's stamp</p>		
<p>Date of sale: Batch N°:</p>		