



RMG AUTOMATION

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Automatic Water Level Controller with Indicator

Model : AWLC-140



User Manual

Version 2.1-09/23

1. INTRODUCTION

Water saving is lifesaving. RMG Automation introduces highly economical model that has basic features in it. This Basic Automatic Water Level Controller automatically turns ON motor when tank is empty and turns OFF the motor when tank is full. Also, shows four levels for the tank 25%, 50%, 75% and 100%. It is suitable for Borewell To Tank set up.

2. DESCRIPTION

- **POWER ON/OFF Switch** – used to power ON/OFF the controller.
- **POWER ON LED**- It indicates the power supply to the unit.
- **MOTOR ON LED** – It indicates the motor ON condition.
- **LEVEL INDICATOR LEDs (L1,L2,L3,L4)** – used to indicate water levels in tank. (AWLC-140 has 25%,50%,75%,100% indications)
- **MANUAL START/STOP SWITCH:** It helps to start and stop the motor manually in case required.

3. TOOLS REQUIRED

- 3pair or 6 wire communication cable.
- Drill gun
- Simple hammer
- Wooden gattas
- Screws for mounting units on wall
- Line tester
- Wire stripper,
- 1.5Sq. mm Wire for power connections
- Cable - 6 core
- Insulation tape

4. INSTALLATION PROCEDURE

Caution: Switch off the main power while doing the Power Connection steps.

Step 1: Wall mount the Controller unit nearby motor pump switch/starter location.

Step 2: As per the model purchased, check the label and connect AC supply (230V / 440 V) to 1st and 2nd terminal of the controller (red and black wire) refer figure 1 and figure 2.

Step 3: For switch or MCB, Connect 3rd and 4th terminal of the controller (blue pair wire) to the switch/MCB of the motor in parallel as shown in figure 1.

Step 4: For starter, Connect 3rd and 4th terminal of the controller (blue pair wire) to ON button of starter in parallel and 5th and 6th terminal (black pair wire) to OFF button in series (Refer to figure.2 and figure.3)

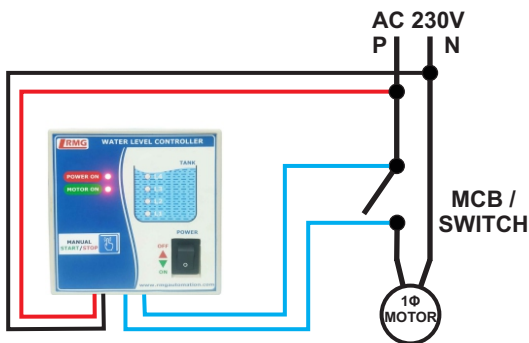


Figure1: 1Φ SWITCH/MCB

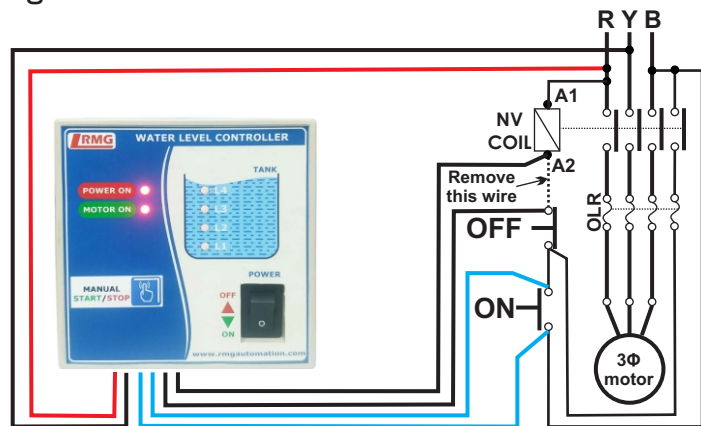


Figure2: 3Φ Starter

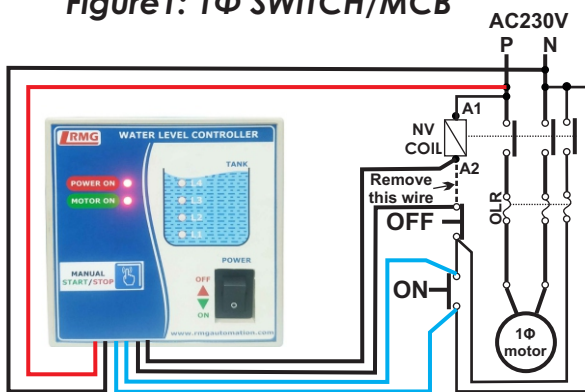


Figure3: 1Φ Starter

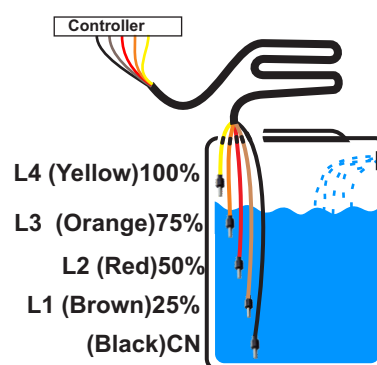


Figure4: contact type sensor connection

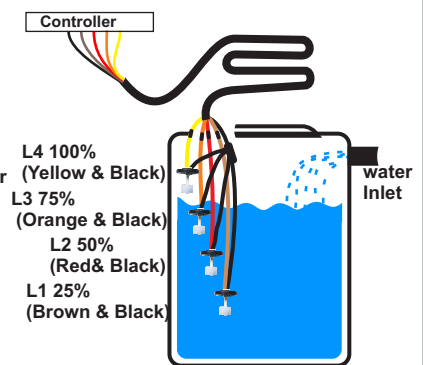


Figure5: magnetic float sensor connection

Note: In case of doubts please call 044 - 43180017 or What's App 9940594413 from Monday to Saturday 10 am to 6 pm.

Step 5: Lay 6 core cable between controller and tank. Join one end of the 6 core cable to sensor line of the controller as per colour coding. In tank side, **Contact**

type sensor connection: Take the sensors and cut them according to the levels of tank and join them with the 6 core cable as per label coded. (Refer figure 4).

Magnetic float sensor connections: These sensor has 2 wires. Use any one wire in each sensor as common. Other wires left in each can be used for levels. Join them with 6 core cable as per label coded. (Refer figure 5)

Step 6: Immerse the Sensors inside the Over Head Tank (OHT) and tape it. Sensors should be in 25%, 50%, 75% and 100% of tank.

This completes installation.

5. OPERATING PROCEDURE

- Turn on the Power On/OFF switch. Power ON LED will glow.
- Depending upon the water level in tank, level indicator LEDs will be ON.
- When tank level goes below 50% (L2), controller turns ON the motor. Then MOTOR ON LED will glow.
- When tank is full and reaches 100% (L4), controller turns OFF the motor and MOTOR ON LED will be OFF.
- Using Manual ON/OFF switch you can turn ON or OFF the motor when tank levels are between L2 and L4.

6. TROUBLE SHOOTING METHODS

S. No.	Error	Solutions
1	Device dead / Not Powered ON	a. Check the power connection wires for loose contacts. b. If problem continues, contact RMG Automation for support
2	Tank level indicator LEDs are off	a. In the controller unit, join common terminal with a small wire to other terminals one by one and verify the tank LEDs are glowing. This means the controller unit is fine. b. Check the cables between controller and tank for cable breakage. If so correct it. c. Check common sensor and other sensor connections are correctly made. If any loose contacts correct it..
3	Motor not switching ON:	a. Check whether the connections are given properly. b. If connections are okay and still issue persist, contact RMG Automation for support