RMG AUTOMATION
+91 9940594413

Automatic Water Level Controller with Indicator for Tank & Sump

Model : AWLC-141

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 ensuring that sump has enough water and turns OFF the motor when tank is full or when sump is empty. Also, this model shows four levels for the Over Head Tank (OHT) 25%, 50%, 75% and 100%. It is suitable for Sump to Tank set up.

2. DESCRIPTION

- **POWER ON LED**- It indicates the power supply to the unit.
- **MOTOR ON LED**- indicates motor ON indication.
- **SUMP LED INDICATION:** It helps to indicate the availability of water level in the sump.
- **TANK LEVEL INDICATIONS:** used to indicate water levels. (AWLC-141 has 25%, 50%, 75%, 100% indications for OHT)
- **MANUAL/AUTO Mode switch:**

Auto mode: In AUTO mode, motor will automatically switch ON when the water level in the tank is low and automatically switch OFF when the tank becomes full.

Manual Mode: Helps to switch ON the motor manually. In this mode, the motor will be constantly running

. Semi-Automatic: (Manual ON and Auto OFF) Just keep the controller in MANUAL mode for the motor to get switched ON and then change it to AUTO mode for Automatic OFF.

3. TOOLS REQUIRED

- Single or 2 pair 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 figure1.

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)

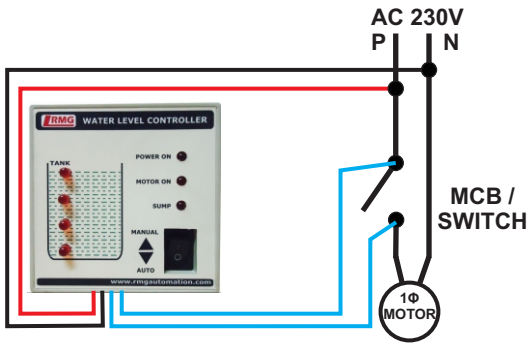

Figure1: 1Φ SWITCH/MCB

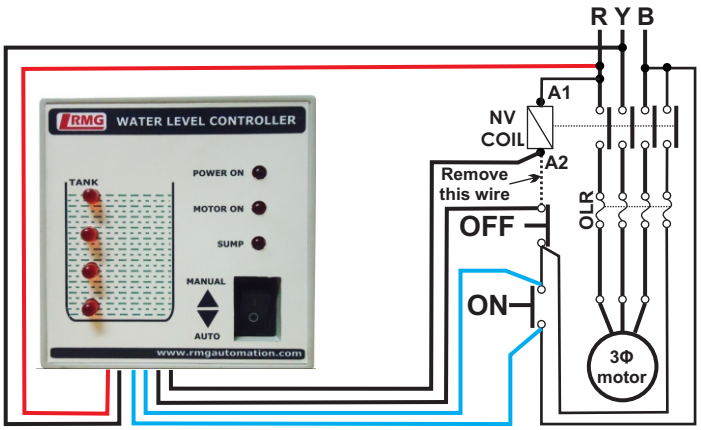

Figure2: 3Φ Starter

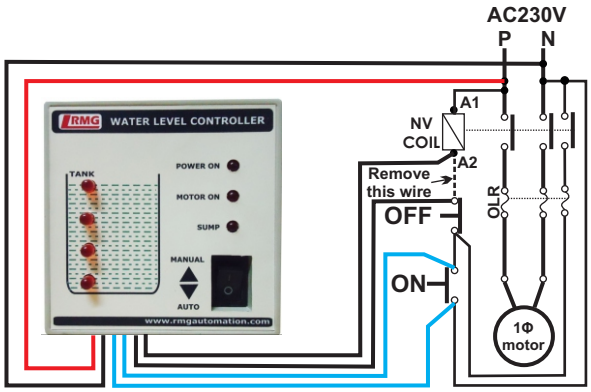

Figure3: 1Φ Starter

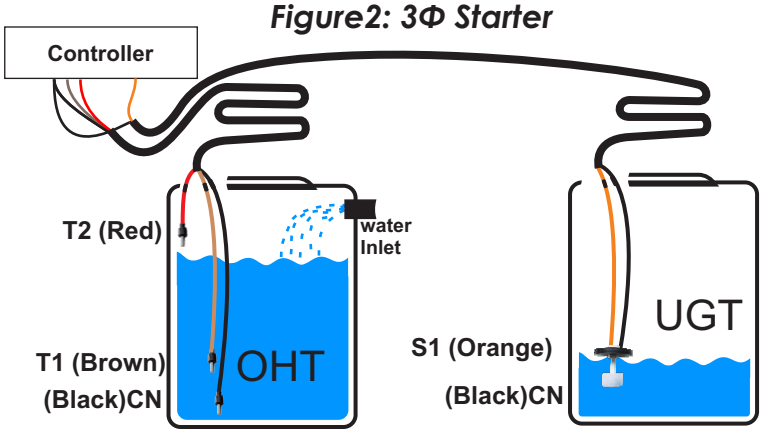

Figure4: Sensor Connection

Note: In case of doubts in installation, 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. **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 4 core cable as per label coded. (Refer figure 4)

Step 6: Immerse the sensors inside the OHT & UGT as per Figure, and tape it. This completes installation.

Version 2.1-09/23

5. OPERATING PROCEDURE

- Turn on the Power On/OFF switch. Power ON LED will glow.
- Depending upon the water level in tanks, level indicator LEDs will be ON.
- When Over Head Tank (OHT) level goes below 25%, controller turns ON the motor. Then MOTOR ON LED will glow. This operation occurs only when water is present in Under Ground Tank (UGT). SUMP LED will be in ON condition.
- When OHT is full and reaches 100% or when UGT level becomes empty (SUMP LED in OFF condition), the controller turns OFF the motor and MOTOR ON LED will be OFF.
- In manual mode, Motor will be continuously running. MOTOR ON LED will be ON.

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