

## Total TWPS102

# Total TWPS102 Automatic Pump Control User Manual

Model: TWPS102

## 1. INTRODUCTION

This manual provides essential information for the safe and efficient operation, installation, and maintenance of your Total TWPS102 Automatic Pump Control. Please read this manual thoroughly before installation and use to ensure proper function and to prevent damage or injury.

## 2. SAFETY INSTRUCTIONS

Always observe basic safety precautions to reduce the risk of fire, electric shock, and personal injury.

- **Electrical Safety:** Ensure the power supply matches the device's rated voltage (220-240V, 50/60Hz). Disconnect power before any installation or maintenance. All electrical connections must be performed by a qualified electrician.
- **Pressure Safety:** Do not exceed the maximum operating pressure of 10 bar. Ensure all pipe connections are secure and leak-free.
- **Installation Environment:** Install the device in a dry, well-ventilated area, protected from direct sunlight, rain, and freezing temperatures. The protection degree is IP65, indicating protection against dust and low-pressure water jets, but it is not submersible.
- **Children and Pets:** Keep the device out of reach of children and pets.

## 3. PRODUCT OVERVIEW

The Total TWPS102 is an automatic pump control unit designed to manage the operation of water pumps based on water demand and pressure. It integrates a pressure switch and flow sensor to automatically start and stop the pump.



Figure 1: Front view of the Total TWPS102 Automatic Pump Control, showing the pressure gauge and main housing.



Figure 2: Side view of the Total TWPS102 Automatic Pump Control, highlighting the pipe connections and specifications label.

#### 4. SPECIFICATIONS

Parameter	Value
Rated Voltage	220-240V

Frequency	50/60Hz
Starting Pressure	1.5 bar
Max. Current	10A
Max. Pressure	10 bar
Pipe Diameter	1" x 1"
Protection Degree	IP65
Material	Plastic
Color	Black
Item Weight	209 g
Product Dimensions	1 x 1 x 1 cm

## 5. SETUP AND INSTALLATION

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### 5.1 Pre-installation Checks

- Verify that the pump control unit is undamaged.
- Ensure the power supply is compatible with the unit's specifications.
- Confirm that the pump and piping system are clean and free of debris.

### 5.2 Mounting

The unit should be installed vertically, with the water flow direction matching the arrows on the device. Mount it securely to a stable surface or directly onto the pump's outlet pipe.

### 5.3 Pipe Connection

Connect the pump control unit to the pump's outlet and the distribution system using the 1" x 1" pipe diameter connections. Use appropriate sealing tape (e.g., PTFE tape) on threaded connections to ensure a watertight seal. Tighten connections firmly but do not overtighten.

### 5.4 Electrical Connection

**WARNING:** Electrical connections must be performed by a qualified electrician. Ensure power is disconnected before wiring.

- Connect the power supply cable (220-240V, 50/60Hz) to the designated input terminals on the control unit.
- Connect the pump's power cable to the designated output terminals on the control unit.
- Ensure all connections are secure and properly insulated.

## 6. OPERATING INSTRUCTIONS

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### 6.1 Initial Startup

1. Ensure the pump and piping system are filled with water and free of air.
2. Open a tap in the distribution system to allow water to flow.
3. Connect the pump control unit to the main power supply. The pump should start automatically.

4. Allow the pump to run until water flows steadily from the open tap, indicating that air has been purged from the system.
5. Close the tap. The pump control unit will detect the cessation of flow and the pump will stop after a short delay, maintaining system pressure.

## 6.2 Normal Operation

The Total TWPS102 operates automatically:

- When a tap or valve is opened, the unit detects a drop in pressure and flow, automatically starting the pump.
- When the tap or valve is closed, the unit detects the cessation of flow and the pump stops after a short delay.
- The unit protects the pump from dry running by stopping it if no water is detected.

## 7. MAINTENANCE

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Regular maintenance ensures the longevity and optimal performance of your pump control unit.

- **Regular Inspection:** Periodically check all electrical and pipe connections for signs of wear, corrosion, or leaks.
- **Cleaning:** Keep the exterior of the unit clean and free of dust and debris. Do not use abrasive cleaners or solvents.
- **Winterization:** In areas prone to freezing temperatures, disconnect the unit and drain all water from it and the connected piping to prevent damage from ice expansion. Store the unit in a dry, frost-free location.

## 8. TROUBLESHOOTING

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Problem	Possible Cause	Solution
Pump does not start when tap is opened.	No power supply; Pump air-locked; Low water supply; Faulty wiring.	Check power connection; Prime the pump; Ensure adequate water source; Verify electrical connections.
Pump runs continuously.	Leak in the system; Tap not fully closed; Faulty pressure sensor.	Check for leaks in pipes/fittings; Ensure all taps are closed; Contact qualified technician if sensor is suspected.
Pump starts and stops frequently (short cycling).	Small leak in system; Insufficient pressure tank (if used); Air in system.	Check for minor leaks; Ensure proper pressure tank operation; Bleed air from system.
Pump stops due to dry running protection.	No water supply to pump; Inlet blocked.	Ensure water source is available; Check pump inlet for obstructions.

## 9. WARRANTY INFORMATION

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This Total TWPS102 Automatic Pump Control is covered by a manufacturer's warranty against defects in materials and workmanship. The specific terms and duration of the warranty may vary by region and retailer. Please retain your proof of purchase for warranty claims.

For detailed warranty information, please refer to the warranty card included with your product or contact your point of purchase.

## 10. SUPPORT AND CONTACT

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If you encounter issues not covered in this manual or require technical assistance, please contact the retailer where you purchased the product or the official Total Tools customer support. When contacting support, please have your product model number (TWPS102) and proof of purchase ready.

For more information about Total products, visit the official Total Tools website or their Amazon store:[Total Tools Official Store on Amazon](#)