PUMP CONTROLLER

INTELLIGENT WATER PUMP CONTROLLER

Product Introduction

Three-phase single pump controller.

This controller boasts powerful functionality and offers simple, convenient installation. It enhances the reliability of your pumping system by detecting dry-run through the monitoring of the pump's current.

Application:
Ideal for water supply in high-rise buildings and the control and protection of sewage transfer and deep well pumping, this versatile controller meets diverse needs.

Its compatibility extends to various pump types, including centrifugal pumps, submersible pumps, multi-stage pumps, deep well pumps, sewage pumps and booster pumps.

Product Dimensions: 320mm x 220mm x 125mm

Main Parameters

Rated voltage:	AC380V ± 10% / 50Hz
Pump or Motor power:	0.75kW - 7.5kW
Controller standby power:	<3W
Water Level Control:	Low, Middle, High or Float Switch
Time based control "ON":	Adjustable from 0 to 48 Hours
Time based control "OFF":	Adjustable from 0 to 480 Minutes
Voltage Protection Range :	304-456V
Dry run delay:	0 to 600 seconds
Overload delay:	0 to 600 seconds
Phase loss delay:	<2 seconds



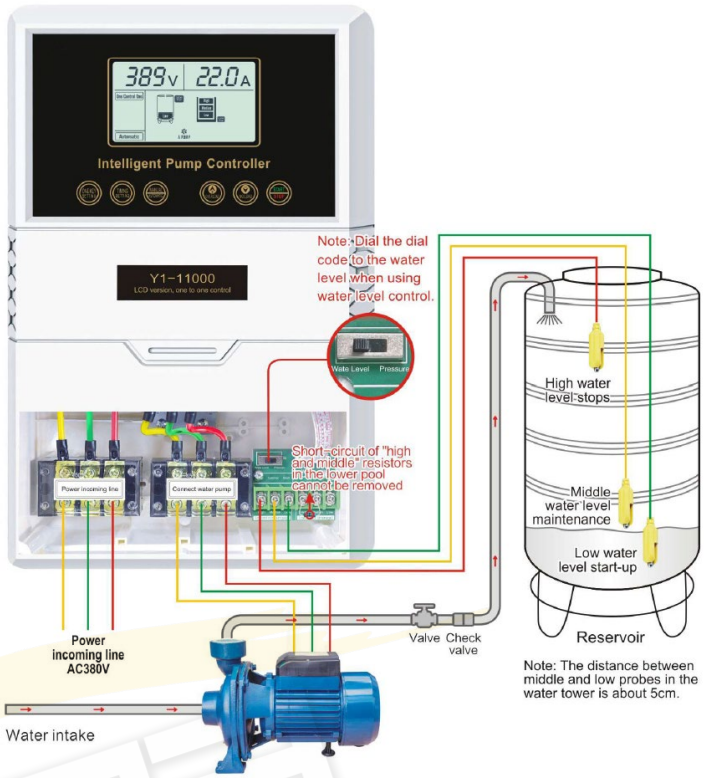
Main Function

- **Pressure Control Options**: Choose between a two-wire pressure switch or a three-wire electric contact pressure gauge, providing versatile options to suit your specific pressure control needs.
- **Liquid Level Control Options:** Opt for either electrode probe or float switch detection for versatile and effective liquid level control.
- **Display:** Voltage display, current display, upper/lower reservoir water level display.
- **Control Mode:** Easily switch between automatic and manual mode.
- **Intuitive Fault Identification:** Receive word-based fault finding indications on the monitor screen accompanied by an audible beep.
- **Comprehensive Protection Features**: Ensure reliable operation with a robust suite of protections, including locked-rotor overload protection, safeguards against water shortage, no-load conditions, phase failure, short circuit protection, and over/under voltage protection.
- **Current Monitoring:** Independently set parameters for overload and no-load protection, with adjustable no-load delay start for enhanced control.
- **Automatic Restart Feature:** Following over/under-voltage protection, the system will initiate an automatic restart once the voltage returns to normal levels.
- **Effortless Configuration:** Enable easy setup with a one-key setting for overload and idling current protection.
- **Versatile Control Options:** Choose between manual and automatic start-stop modes, implement regular start-stop cycles, and enable automatic restart after power failure for flexible operational control.
- **Multi-Functional Control:** Efficiently manage liquid levels, pressure, and seamlessly switch between controls.
- **Factory Settings Restoration:** Simply press and hold the overload and no-load buttons simultaneously for three seconds to restore the controller to its factory settings.
- **Failure History:** Access the last 10 recorded fault events.
- **No-Load Restart Customization:** Tailor the no-load restart feature to your preferences with an adjustable range spanning from 0 to 999 minutes.

Schematic Diagram of Intelligent Water Pump Controller Installation Wiring

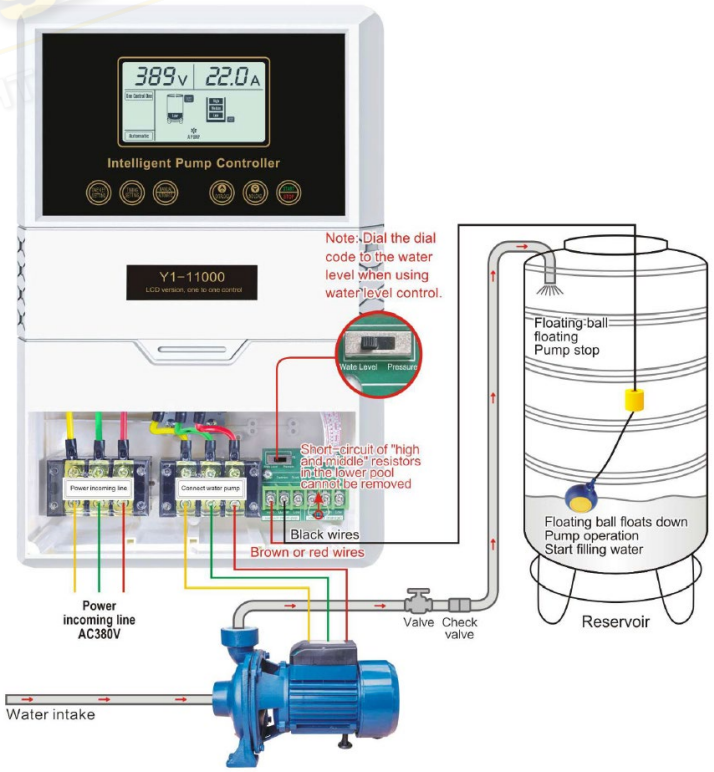
Schematic diagram of wiring, using electrode probes when filling a tank

1. Set the dip switch to the water level position.
2. Connect the probe in “high, middle and low” positions.
3. Correspondingly connect it to the “1(High), 2(Middle) & 3(Low)” terminals on the signal board.
4. Working mode: The pump starts when the water level is below middle and stops when the water level reaches high.



Schematic diagram of wiring, using a float switch when filling a tank

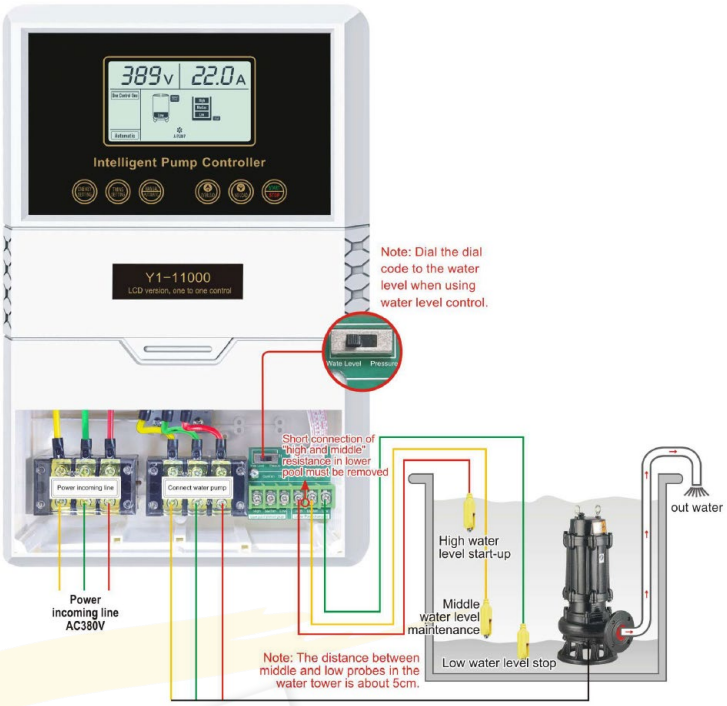
1. Set the dip switch to the water level position.
2. Connect the normally open wires of the float switch to “1 (High) and 2 (Middle)” terminals on the signal board.
3. Working mode: The pump starts when the float switch is in the downward position and stops when in the upward position.



Note: Avoid Signal Line Short Circuits: Ensure no entanglement with power or pump lines, and steer clear of areas with strong interference from electrical appliances like transformers or signal towers.

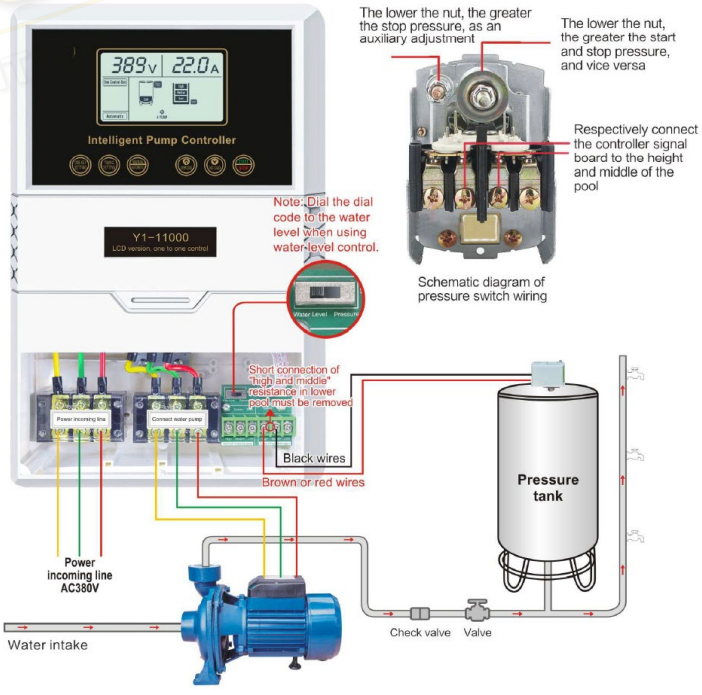
Schematic diagram of wiring, using eletrode probes when draining a sump or well.

1. Set the dip switch to the water level position.
2. Remove the bridge resitor between “4 and 5”
3. Connect the probe in “high, middle and low” positions.
4. Correspondingly connect it to the “4(High), 5(Middle) & 6(Low)” terminals on the signal board;
5. Working mode: The pump starts when the water level reaches high and stops when the water level is below middle.



Schematic diagram of wiring, using a pressure switch for constant water pressure supply.

1. Set the dip switch to the water level position.
2. Remove the bridge resitor between “4 and 5”
3. Connect the two wires of the pressure switch to “4 (High) and 5 (Middle)’
4. Working Mode: The pump starts when the contacts on the pressure switch is closed and stops when the contacts on the pressure switch is open.



Note: Avoid Signal Line Short Circuits: Ensure no entanglement with power or pump lines, and steer clear of areas with strong interference from electrical appliances like transformers or signal towers.

Schematic diagram of wiring, using eletrode probes when filling a tank and draining a sump or well.

1. Set the dip switch to the water level position
2. Remove the bridge resitor between “4 and 5”

Tank connection.

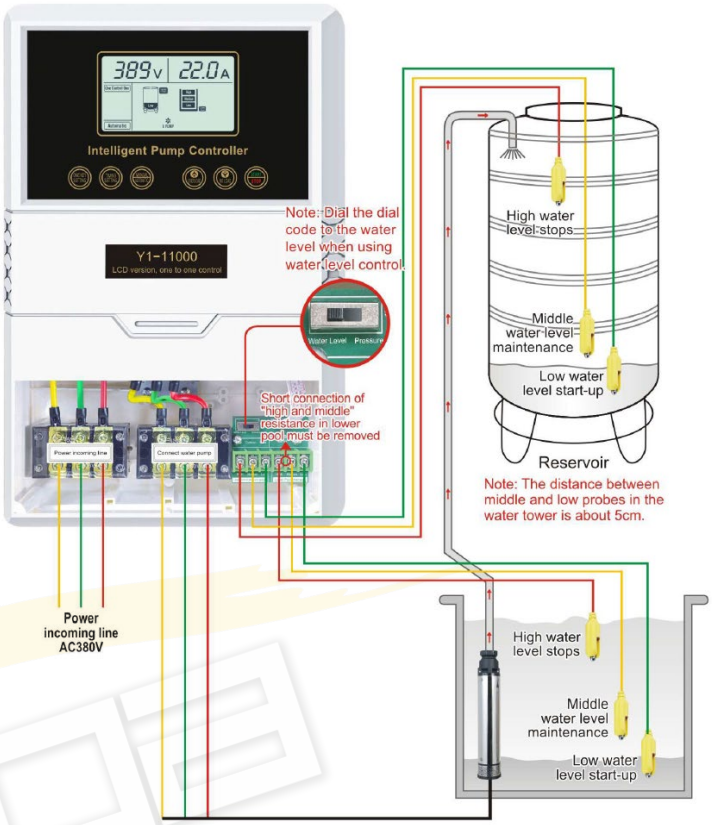
3. Set the dip switch to the water level position.
4. Connect the probe in “high, middle and low” positions.
5. Correspondingly connect it to the “1(High), 2(Middle) & 3(Low)” terminals on the signal board.

Sump or Well connection.

6. Connect the probe in “high, middle and low” positions.
7. Correspondingly connect it to the “4(High), 5(Middle) & 6(Low)” terminals on the signal board.

Working mode.

8. The pump starts when the tank level is below middle, provided that the well level is above middle.
9. The pump stops when the tank level reaches high or when the well level is below middle.



Note: Avoid Signal Line Short Circuits: Ensure no entanglement with power or pump lines, and steer clear of areas with strong interference from electrical appliances like transformers or signal towers.