

Intelligent non-contact liquid level controller instruction manual

XKC-C352 (AC180V-250V)

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1st. Overview

XKC-C352 Intelligent non-contact liquid level controller and XKC-Y25-V liquid level sensor realize the function of liquid level high and low control: when the container liquid level is too low, the low liquid level alarm signal sent by the low liquid level sensor is triggered to trigger the C352 controller to close the relay to start the water pump. Add the liquid level, when the liquid level reaches a certain height, the high liquid level sensor sends out a signal to trigger the C352 controller to disconnect the relay and automatically stop the water pump to work in a cycle. Thereby, the function of automatic control of the container liquid level is realized, and the container liquid level is kept stable.

2nd. Product Features

1. AC180V~250V power supply
2. Relay dry node output, suitable for various load control
3. The control is diversified, and the pump can be controlled in manual or automatic mode
4. The installation is simple and convenient, it can be installed with screws or electric box tracks

3rd. Technical Parameters

model	XKC-C352
Name	C352 Intelligent non-contact liquid level controller
Input voltage	AC180V-250V, 50/60Hz
Working current	Working current ≤ 110 mA, static current consumption ≤ 20 mA
Load power	Resistive load below 1.6KW (overload or three-phase load needs to be installed with AC contactor) Inductive load below 1KW (overload or three-phase load needs to be installed with AC contactor) Inductive loads refer to loads with inductive coils, such as motors, electromagnets, solenoid valves and so on.
Alarm Output	800W (resistive load) normally open / normally closed output
output method	Normally open/normally closed output
input signal	Low sensor signal input; High-position sensing signal input;
Sensor interface voltage	DC 12V
Operating temperature	-20~105°C
Dimensions	115*90*40

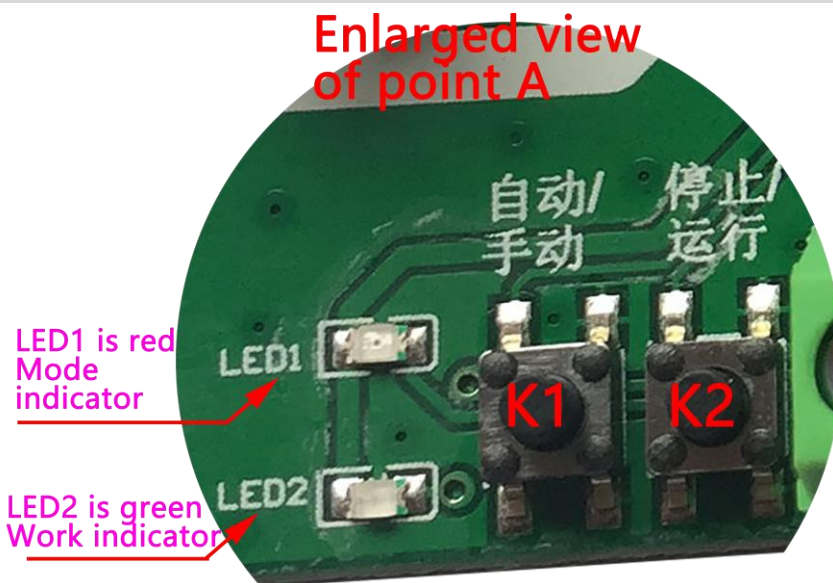
4th. Correspondence diagram of signal input and relay output

input signal	Load output		Alarm status	signal	Alarm Output
Low bit is 0, high bit is 0	Normally open end (NO) is closed, normally closed end (NC) is open	Loop 	Low bit is 0, high bit is 1		Normally open end (NO) is closed, normally closed end (NC) is open
The low bit is 1, the high bit is 0 (The water level rises)	Normally open end (NO) is closed, normally closed end (NC) is open		High overflow is 1		Normally open end (NO) is closed, normally closed end (NC) is open
The low bit is 1, the high bit is 1	Normally open (NO) open, normally closed (NC) closed		Alarm status, load output: normally open open, normally closed closed (Relay disconnected state, load disconnected to enter protection)		
The low bit is 1, the high bit is 0 (Water level drops)	Normally open (NO) open, normally closed (NC) closed				
Note: 0 means that the sensor cannot detect water and outputs a low-level 0V voltage, 1 means that the sensor detects that there is water and outputs a high-level 12V voltage.					

5th. Product selection model

XKC-C352-1P, (with 1 sensor);
XKC-C352-2P, (with 2 sensors);
XKC-C352-3P, (with 3 sensors);
XKC-C352-4P, (with 4 sensors);

6th. Basic function introduction



Manual/automatic switch to K1 button
Stop/run switch to K2 button

K2 button:

1. Press the button when alarming to cancel the alarm.
2. In manual mode, press this button to start/stop the water pump.

1. Automatic control of water inflow: the water level is lower than the low level sensor, the water pump is automatically started, the water level rises to the high level, and the water pump is automatically turned off.

(Automatically enter the water)

2. Automatic drainage control : the water level rises to a high level, the water pump is automatically started, and the water level is lower than the low level sensor, and the water pump is automatically turned off. (Automatic drainage)

3. Manual automatic switching: The controller enters the automatic working mode by default when it is turned on. Press the K1 key to switch the working mode. The red light is on for automatic mode, and the red light is off for manual mode.

4. Water inlet pipe abnormal alarm: When the controller starts to pump water automatically, and the water inlet pipe sensor cannot detect water within a certain period of time (within 10 to 30 seconds), the load output relay is disconnected to stop pumping, and the alarm output relay is closed.

5. Abnormal water overflow alarm: the controller starts to pump water automatically, and when the water surface rises to the position of the overflow alarm sensor, the load output relay is disconnected to stop pumping, and the alarm output relay is closed.

6. Abnormal low sensor alarm: the controller starts to pump water automatically. If the low sensor fails or falls off, and the water surface rises to the high sensor position, the load output relay is disconnected to stop pumping, and the alarm output relay is closed.

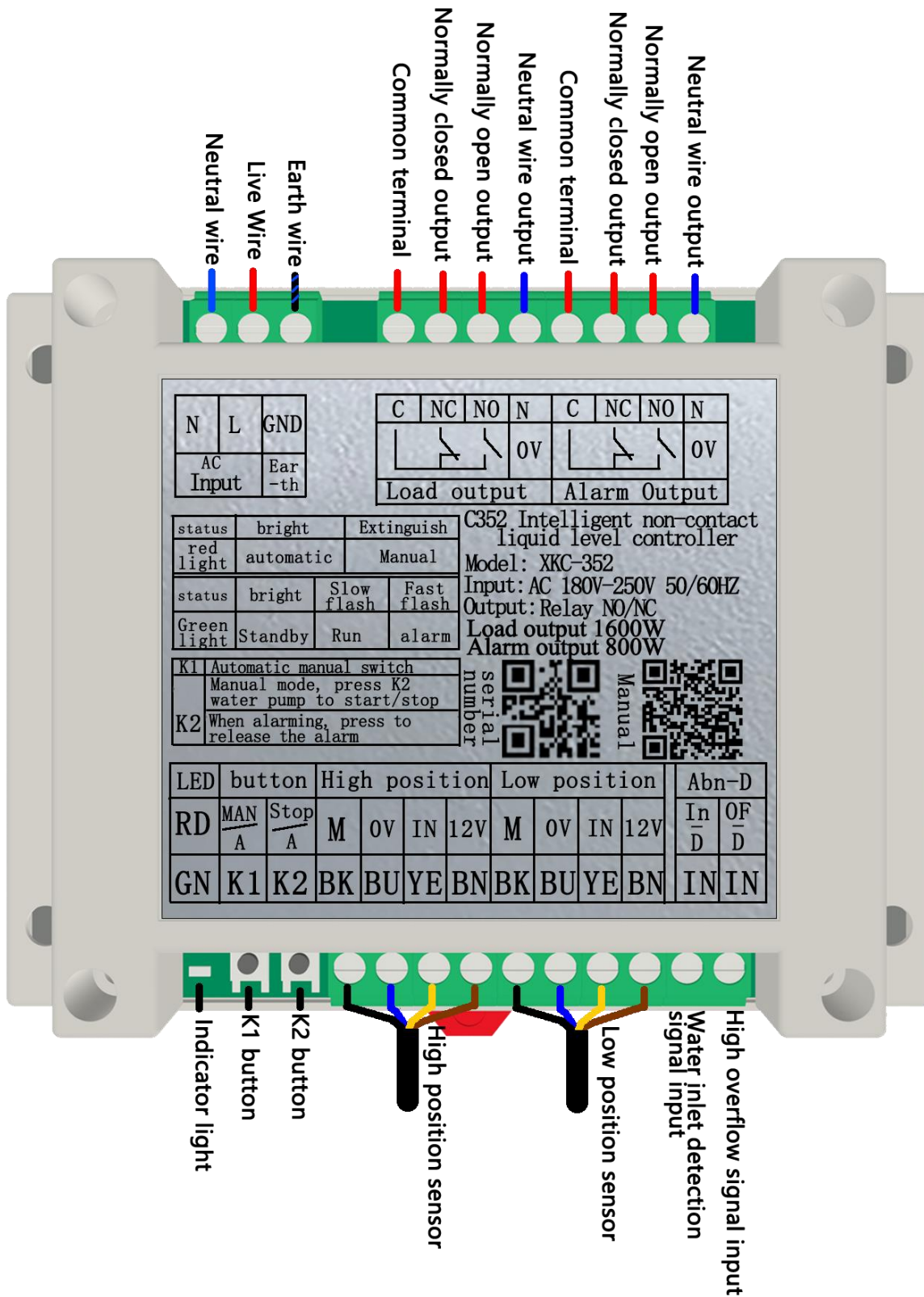
7th.Recommended installation method description

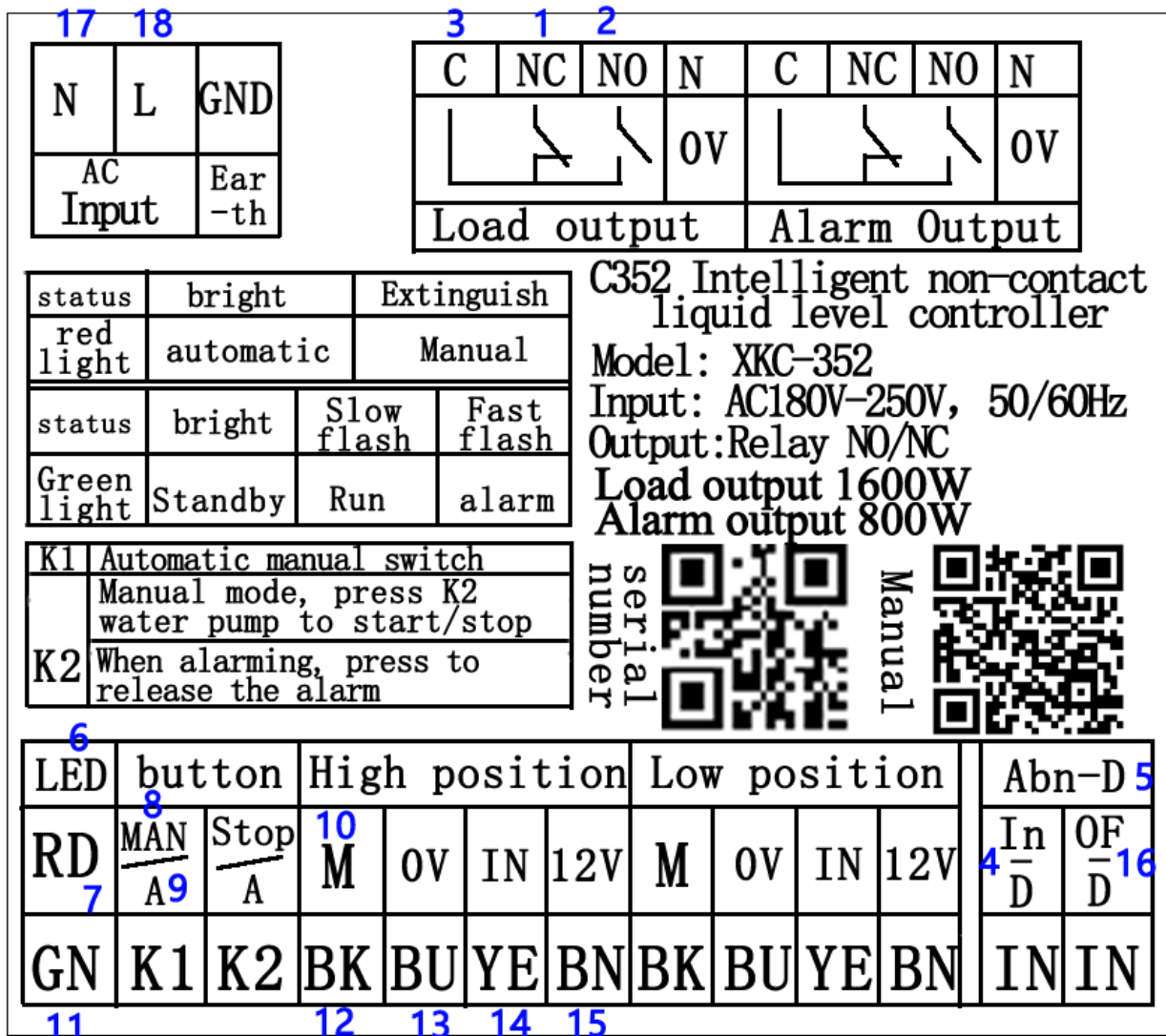
XKC-C352 Intelligent non-contact liquid level controller (the bottom shell is equipped with 35mm track groove) can be directly hung in the electric box and electric cabinet.

Sensor installation: different types of sensors have different installation methods, please refer to the relevant chapters of the specifications corresponding to the sensor model you are using. I won't repeat them here.

8th.Recommended wiring and application diagram

Terminal description





Abbreviations in labels

1.NC: Normally closed

2.NO: Normally Open

3.C: Common terminal

4.IN-D: Water ingress detection

5.Abn-D: Abnormal detection

16.OF-D: High liquid level overflow detection

17.N: Neutral wire

18.L: Live Wire

6.LED: Led light

7.RD: Red

8.MAN: Manual

9.A: Automatic

10.M: Mode

11.GN: Green

12.BK: Black

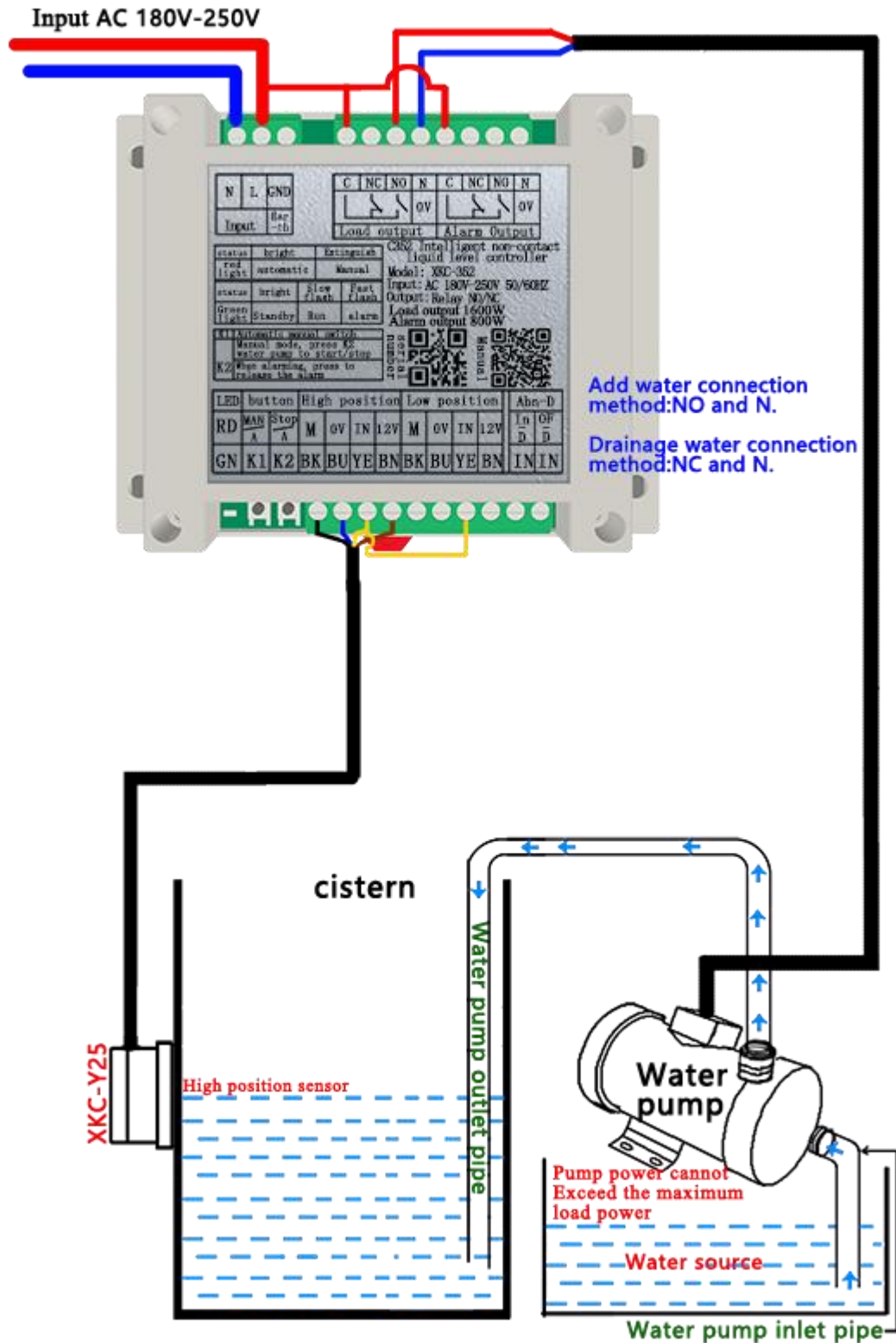
13.BU: Blue

14.YE: Yellow

15.BN: Brown

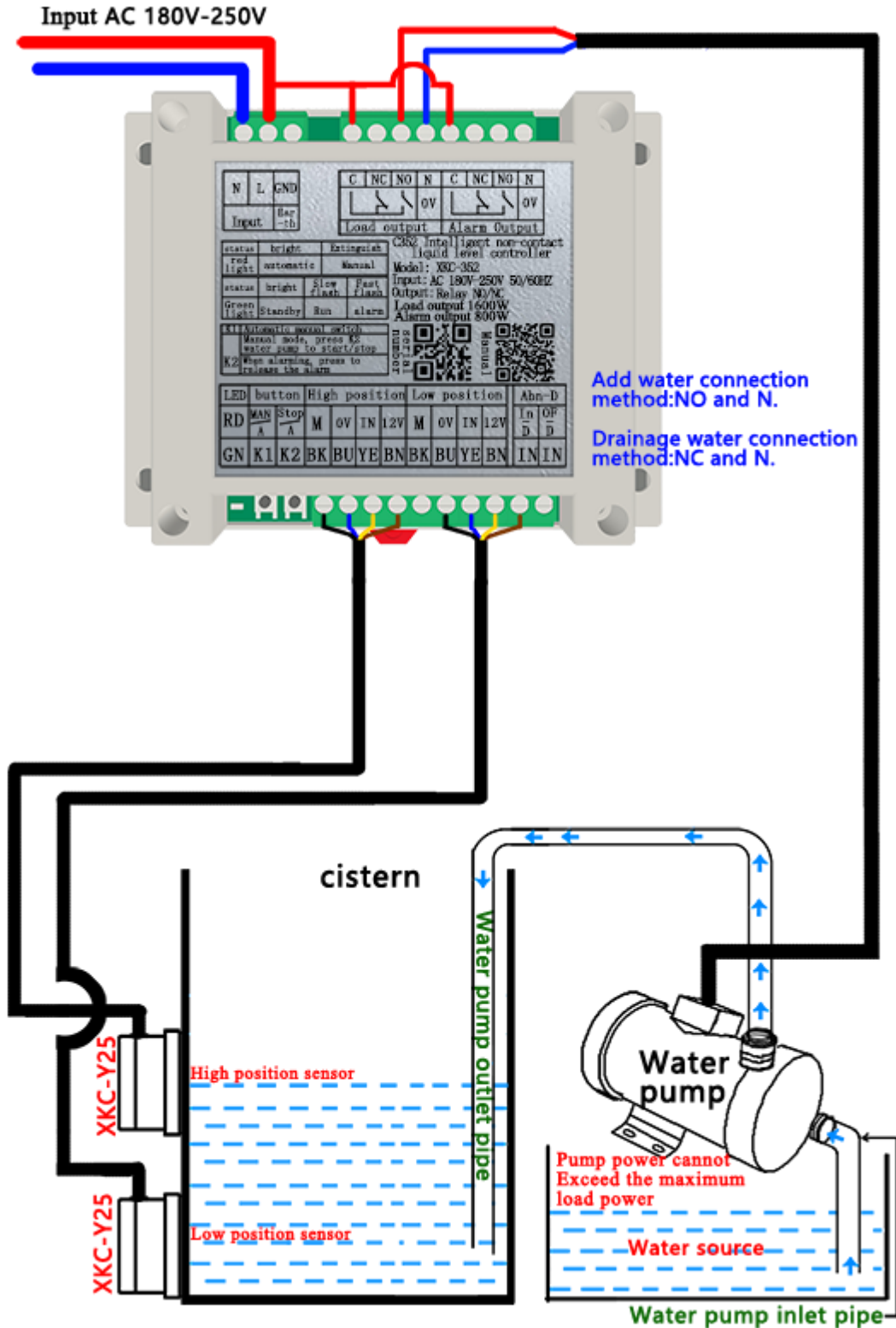
(1) XKC-C352-1P wiring diagram

The following figure uses the Intelligent non-contact liquid level controller C352 + 1 XKC-Y25 non-contact liquid level sensor to realize automatic water level control



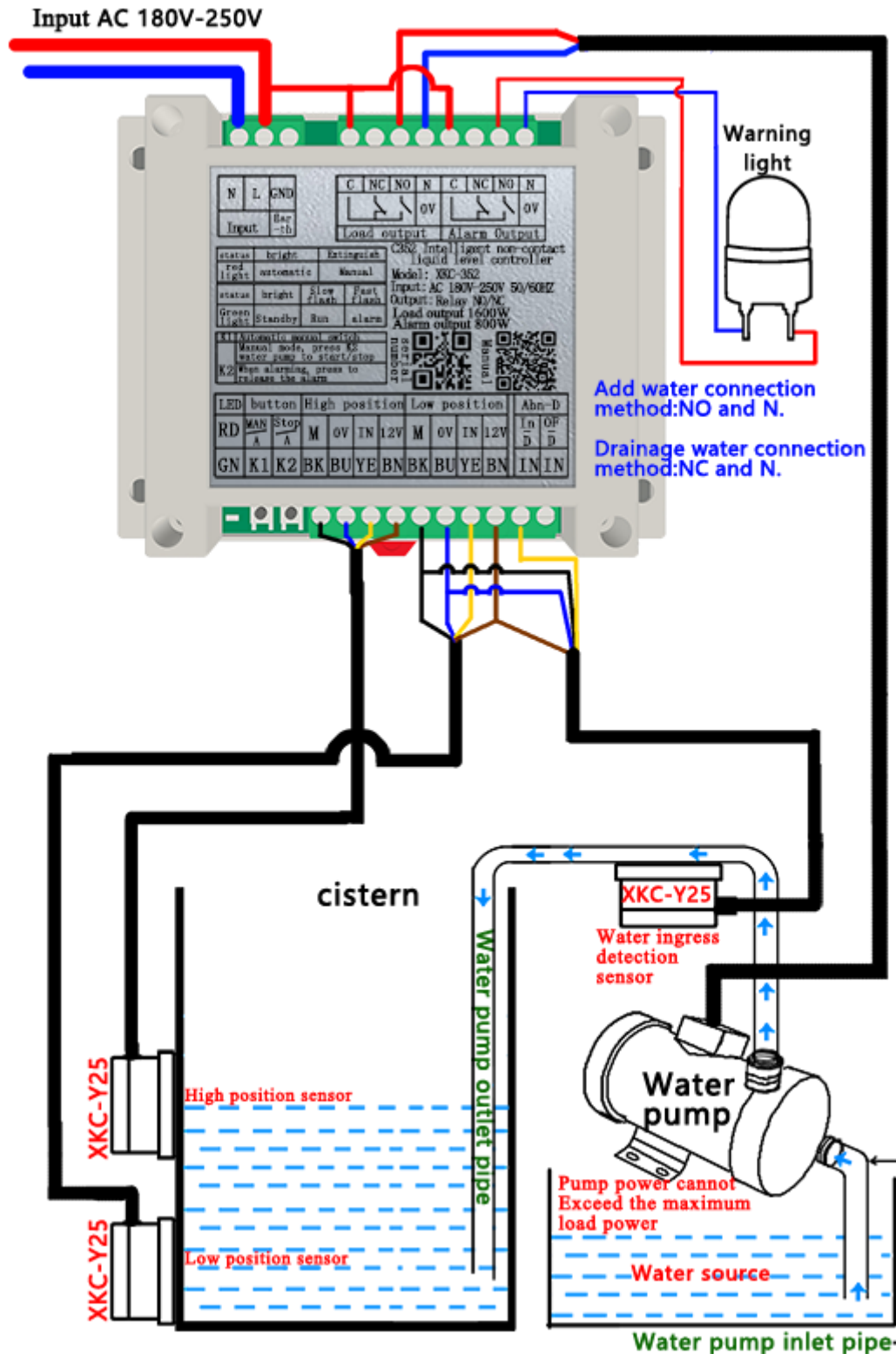
(2) XKC-C352-2P wiring diagram

The following figure uses the Intelligent non-contact liquid level controller C352 + 2 XKC-Y25 non-contact liquid level sensors to achieve automatic water level control.



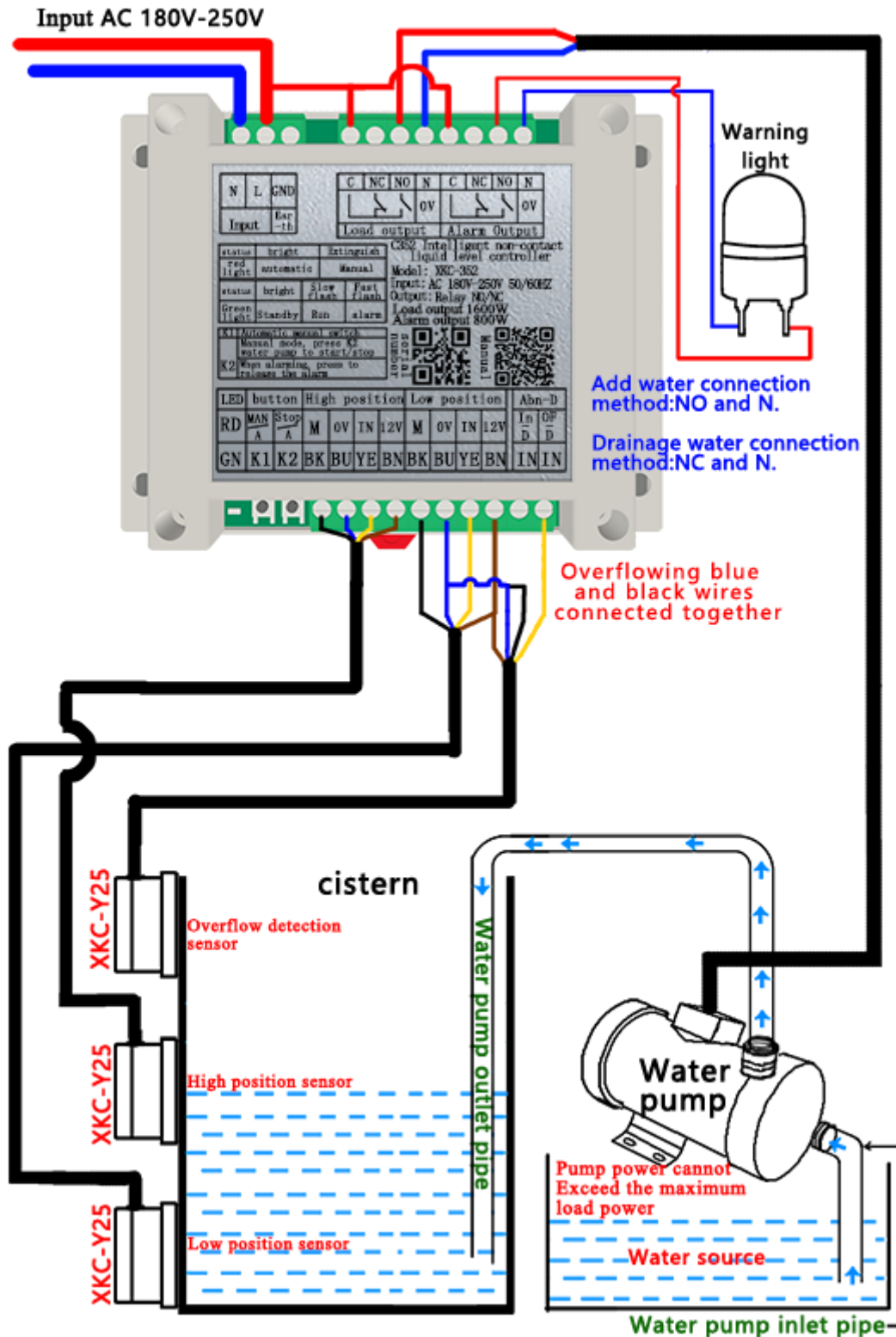
(3) XKC-C352-3P wiring diagram

The following figure uses the Intelligent non-contact liquid level controller XKC-C352 + 3 XKC-Y25 non-contact liquid level sensors to realize functions such as automatic water level control and water pump idling protection.



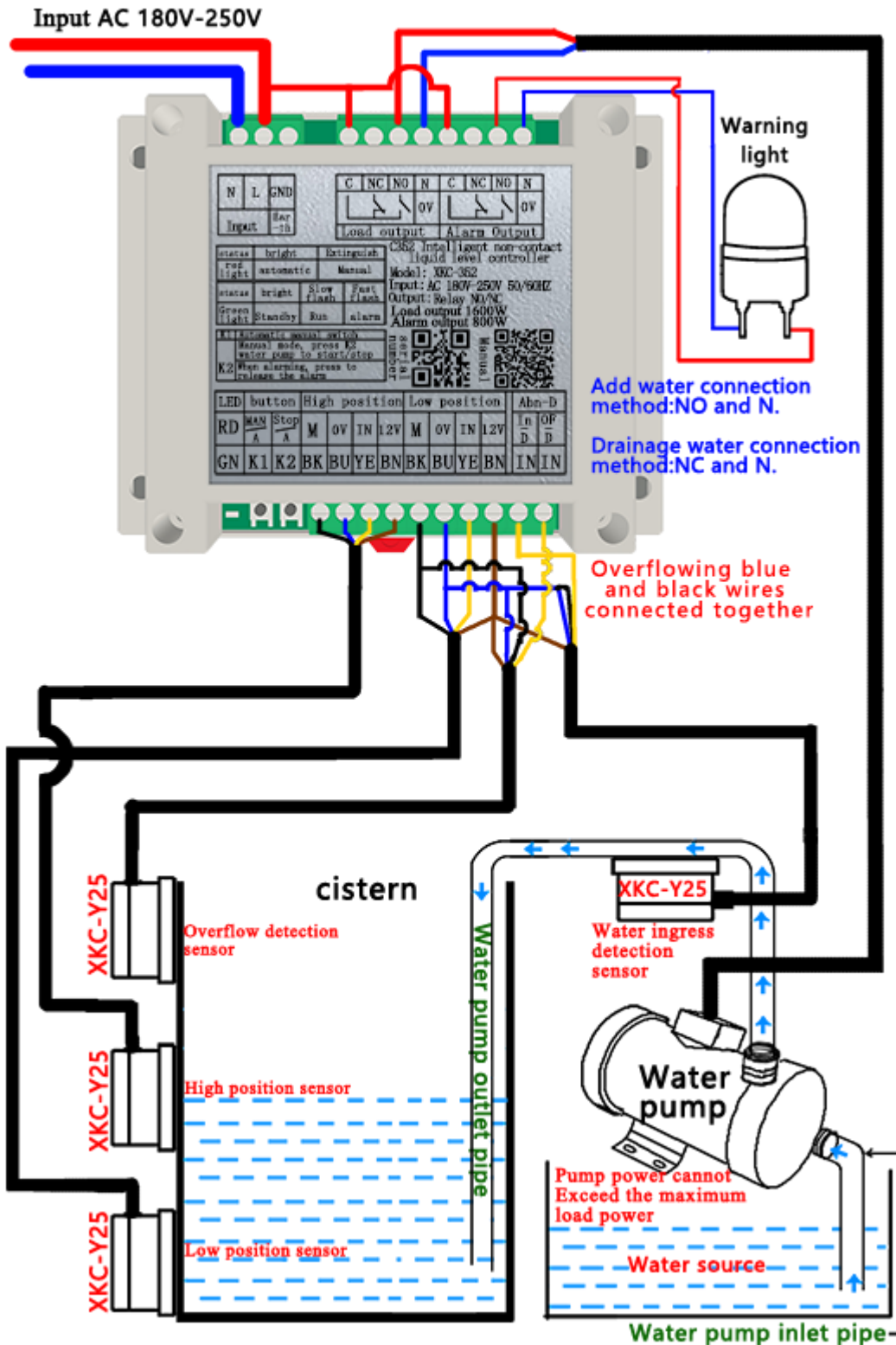
(4) XKC-C352-3P wiring diagram

The following figure uses the Intelligent non-contact liquid level controller XKC-C352 + 3 XKC-Y25 non-contact liquid level sensors to achieve automatic water level control, overflow detection and other functions.

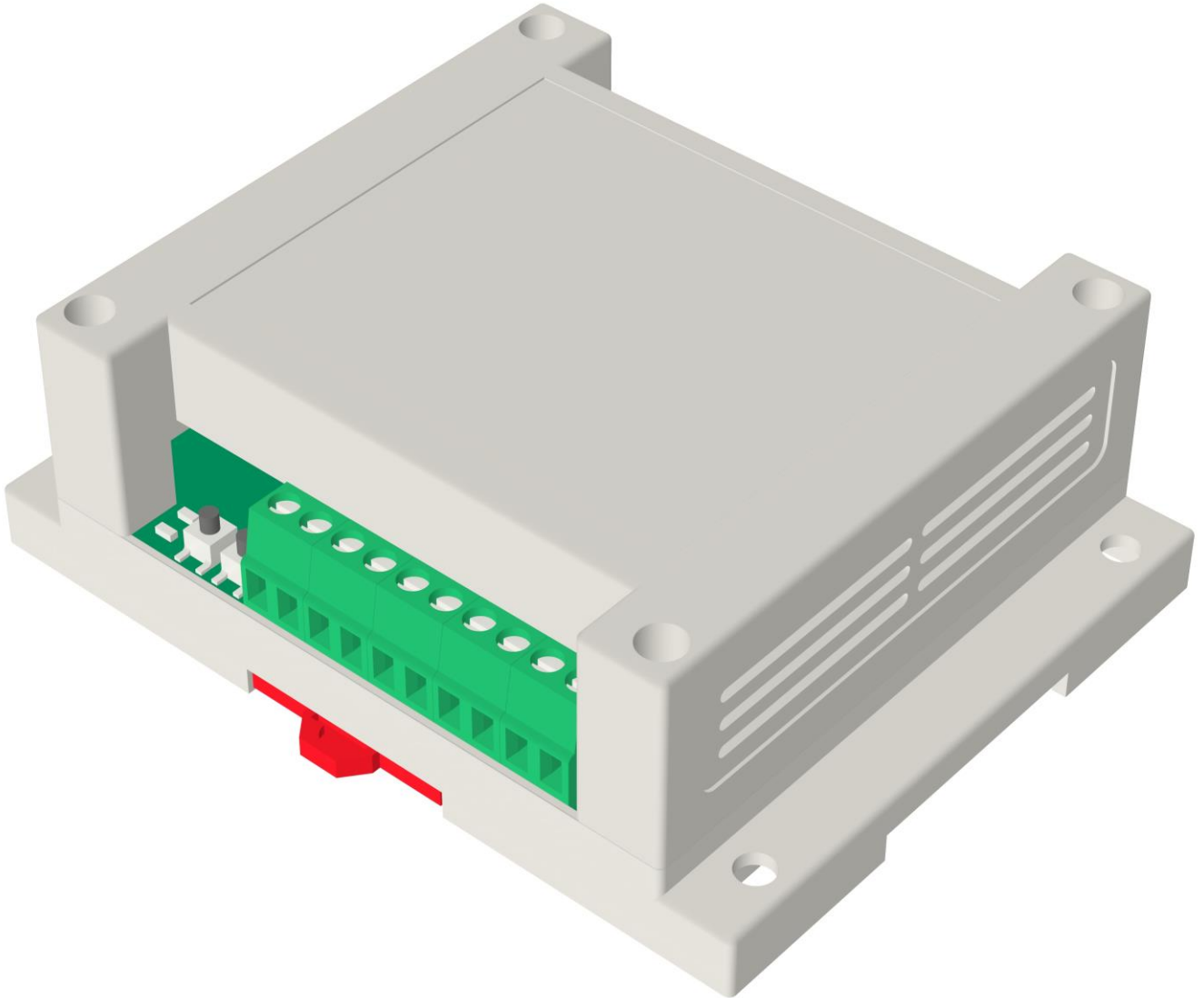


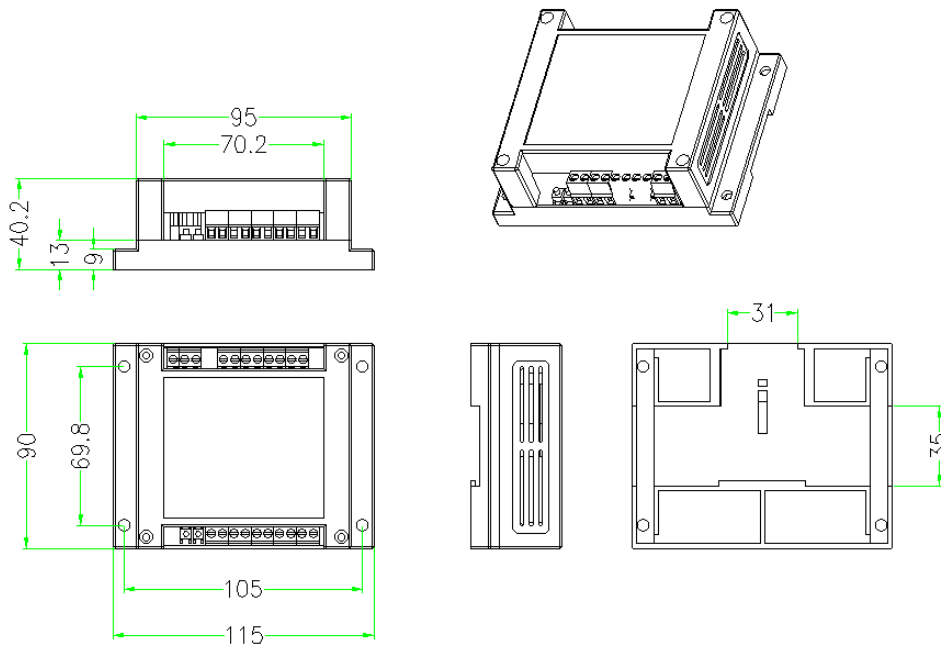
(5) XKC-C352-4P wiring diagram

The following figure uses the Intelligent non-contact liquid level controller XKC-C352 + 4 XKC-Y25 non-contact liquid level sensors to realize automatic water level control, overflow detection, and water pump idling protection.



9th.Product size and physical map





10th. Other matters needing attention

When the controller malfunctions and alarms, please check whether the wiring terminals of all sensors are loose, whether the wiring sequence is correct, and check whether the installation positions of the high-position sensor and the low-position sensor are correct. Whether the sensitivity of each sensor is adjusted to the appropriate position. After troubleshooting, press K2 to stop the alarm.

The pump is not working properly, first check whether the power supply voltage and wiring are normal. Check the contents of the first point above to ensure that it is normal, and then check whether the connection position of the water pump is correct. Check whether the power of the water pump is below 1600W. Check whether the controller is working in the working mode you need (automatic control mode or manual control mode, you can press K1 button to switch).

The controller must be installed in a ventilated, dry, pest-free and dust-less environment.

The control board circuit of the controller is not waterproof, please install it in a dry and ventilated place as much as possible, and take some protective measures against water.

11th. Product warranty terms and instructions

(A) .Warranty service

1. Warranty period maintenance: from the date of purchase, the product host has a one-year free warranty. The company has the right to decide to repair or replace the faulty part. If it is replaced, the replacement part may be a new device or a repair product of the same category, function, and quality. The replaced faulty part belongs to the company; the product Resale and repair do not affect the warranty period. Products that have been repaired or replaced continue to enjoy the original remaining warranty period service. If the warranty period is less than three months after the repair, the repaired or replaced part shall be shipped from the date of delivery Warranty for three months; all products of the company are guaranteed for repair.

2. Loss upon arrival (DOA) replacement: From the day of purchase, you can enjoy a free replacement service within 7 days. Products with the following problems are defined as DOA equipment: the packing and packing list do not match

after the first unpacking of the product; some or all of the components cannot be used normally after the first unpacking of the product (surface scratches or other things that do not affect the function of the device) Defects are not included); other hardware failures identified by our company's engineers remotely or locally.

(B). Applicable limitations of warranty

For the following situations, the company does not assume warranty responsibility:

1. The product is out of warranty; the surface of the product is fragile and damaged; the appearance of the product is seriously damaged, installation/use in abnormal environment, unauthorized disassembly and repair/modification, external power supply damage and other abnormal damage;
2. Damage caused by incorrect installation and use of the product by the user not following the requirements of the manual;
3. Damage caused by natural disasters and human negligence (fire, lightning, flooding, impact, etc.).

(C). Accessories and consumables are not covered by the warranty.

(D). Non-free warranty service

Within two years of product purchase, for non-warranty product (including components) failures and damages, you can choose paid maintenance services (free labor costs), and we will charge the transportation cost of repairing parts and accessories according to the actual situation.

(E). Ways to obtain warranty service

It is recommended that you contact the dealer who purchased this product to obtain the warranty service. For the warranty, please present a valid warranty card (the dealer's stamp is required to take effect) or the purchase invoice/receipt: if you can't show it, the product's free warranty period 12 months from the product shipment date, and the latest DOA application deadline is 7 days from the product shipment date.

(F). Statement

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5. Not all models are available in all countries/regions

Please keep this manual properly. Before using the product, please read this manual carefully. When using the product, please be sure to operate in accordance with this manual. The company is not responsible for injuries and accidents

caused by operations that do not follow this manual.

(G).Environmental protection This product meets the design requirements for environmental protection.The storage, use and disposal should comply with relevant national laws and regulations.Seek to proceed.

12th. Manual version

Version	Release date
V16	September 28, 2020