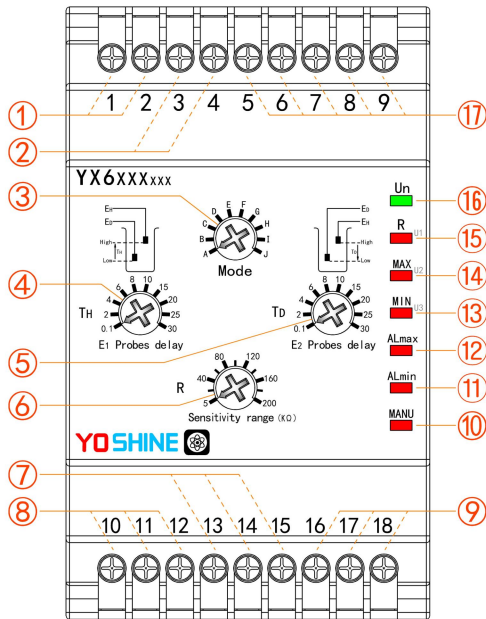


YX6 Series Liquid Level Control Relays is a kind of switch that controls the height of the liquid level in the container. It uses the conductivity of the liquid to turn on or off the contact output when the liquid level reaches a certain height, and automatically monitor run or stop of the water pump to achieve the purpose of controlling the amount of liquid in the container.

Application: It is generally used in homes, industries, commercial places, public places and other places where automatic monitoring of water supply and drainage systems is required. It has small size and complete specification. It can be widely used in domestic water systems, sewage treatment systems, and special liquid supply systems.

MODEL & EXPLANATION



NO.	Terminal number	Illustrate	
①	1	Input voltage (AC/DC)	
	2		
②	3	Manually start push button	
	4		
③	Mode	Function selection	
④	TH	High water level delay	
⑤	TD	Low water level delay	
⑥	R	Sensitivity selection	
⑦	13	NO	ALmax: Ultra-high water level alarm output switch (U2)
	14	COM	
	15	NC	
⑧	10	NO	PUMP: Water pump output switch (U1)
	11	COM	
	12	NC	
⑨	16	NO	ALmin: Ultra-low water level alarm output switch (U3)
	17	COM	
	18	NC	
⑩	MANU	Manually start indicator	
⑪	ALmin	Ultra-low water level alarm indicator	
⑫	ALmax	Ultra-high water level alarm indicator	
⑬	MIN	Low water level indicator	
⑭	MAX	High water level indicator	
⑮	R	U1 work indicator	
⑯	Un	Power indicator	
⑰	5	COM	This description does not include I&J modes.
	6	E4: Ultra-low water level probe	
	7	E3: Ultra-high water level probe	
	8	E2: Low water level probe	
Note	9	E1: High water level probe	
	All of the above instructions do not include J-mode		

Technical parameters	Operating voltage: 24-240VAC/DC Sensitivity Adjustable: 5K-200KΩ Delay Time Adjustable: 0.1-30S Output: 10A 240VAC	Application	It can be widely used in domestic water systems, sewage treatment systems, and special liquid supply systems.
Dimensions			

Mode	Diagram	Description of operating status
A	<p>Automatic Water Supply Control</p>	After the liquid level drops below E2, delay TD, U1 is engaged and the pump starts; After the liquid level rises above E1, delay TH, U1 disconnects and the pump stops.
B	<p>Automatic Drainage Control</p>	After the liquid level rises above E1, delay TH, U1 is engaged and the pump starts; After the liquid level drops below E2, delay TD, U1 disconnects and the pump stops.
C	<p>Automatic Water Supply Control with Abnormal Water Shortage Alarm</p>	After the liquid level drops below E2, delay TD, U1 is engaged and the pump starts. After the liquid level rises above E1, delay TH, U1 disconnects and the pump stops. After the liquid level drops below E4, delay 1s, U3 is absorbed and the water shortage alarm is issued. After the liquid level is below E4 and the water shortage alarm is issued, U1 is not allowed to work.
D	<p>Automatic Water Supply with Overfull Tank</p>	After the liquid level drops below E2, delay TD, U1 is engaged and the pump starts. After the liquid level rises above E1, delay TH, U1 disconnect, pump stop. After the liquid level reaches above E3, delay 1s, U2 suction, issue full water alarm. After the liquid level is above E3 and full water alarm is issued, U1 is not allowed to work.
E	<p>Automatic Drainage Control with Abnormal Water Shortage Alarm</p>	After the liquid level rises above E1, delay TH, U1 is engaged and the pump starts. After the liquid level drops below E2, delay TD, U1 disconnects and the pump stops. After the liquid level drops below E4, delay 1S, U3 is absorbed and the water shortage alarm is issued. After the level falls below E4 and a water shortage alarm is issued, U1 is not allowed to work.

Mode	Diagram	Description of operating status
F	<p>Automatic Drainage Control with Overfull Tank Alarm</p>	<p>After the liquid level rises above E1, delay TH, U1 is engaged and the pump starts. After the liquid level drops below E2, delay TD, U1 disconnects and the pump stops. After the liquid level reaches above E3, delay 1S, U2 is absorbed and full water alarm is issued.</p>
G	<p>Automatic Water Supply with Abnormal Water Increase and Water Shortage Alarms</p>	<p>After the liquid level drops below E2, delay TD, U1 is engaged and the pump starts. After liquid level rises above E1, delay TH, U1 disconnect, pump stop. When the liquid level rises above E3, delay 1S, U2 will be engaged and full water alarm will be issued. After the liquid level drops below E4, delay 1S, U3 will absorb and issue a water shortage alarm. U1 is not allowed to operate after the liquid level above E3 issues a full water alarm. U1 is not allowed to operate when the liquid level is below E4 and a water shortage alarm is issued.</p> <p>When starting for the first time or recovering from a power failure, when the liquid level has not reached a height of E4 or more, press the manual start push button (Manual start) so that its U1 is absorbed to lift the water shortage alarm and start the pump.</p>
H	<p>Automatic Drainage Control with Abnormal Water Increase and Water Shortage Alarms</p>	<p>After the liquid level rises above E1, delay TH, U1 is engaged and the pump starts. After the liquid level drops below E2, delay TD, U1 disconnects and the pump stops. After the liquid level reaches above E3, delay 1S, U2 is absorbed and full water alarm is issued. After the liquid level drops below E4, delay 1S, U3 will be absorbed and the water shortage alarm will be issued. After the liquid level is below E4 to issue the water shortage alarm, U1 is not allowed to work.</p>
I	<p>Automatic Water Supply Control with Pump Idling Prevention</p>	<p>After the tank level drops below E2, delay TD, U1 is engaged and the pump starts. After the water tank level rises above E1, delay TH, U1 disconnects and the pump stops. After the water supply level falls below E4, delay 1S, U3 is engaged, and a water shortage alarm is issued. After the water supply source level is below E4 and the water shortage alarm is issued, U1 is not allowed to work.</p> <p>At initial startup or power failure restoration. The water supply source level is below E3, and U1 is not allowed to work. If the water supply level is below E4, U3 is engaged and a water shortage alarm is issued. Pressing the reset button switch (Manual Start) at this time is not effective. If the liquid level of water supply source is lower than E3 and higher than E4, and the liquid level of water tank is lower than E1, press the manual reset button switch (Manual Start), so that its U1 suction and start the pump.</p> <p>※During normal operation: After the water shortage alarm appears, pressing the reset button switch (Manual Start) is not effective.</p>

Mode	Diagram	Description of operating status
J	<p>Level indicator</p>	<p>After the liquid level rises to E3, delay 1S, U3 is engaged. After the liquid level rises to E2, delay 1S, U2 is engaged. After the liquid level rises to E1, delay 1S, U1 is engaged.</p> <p>After the liquid level drops below E1, delay 1S, U1 disconnect. After the liquid level drops below E2, delay 1S, U2 disconnect. After the liquid level drops below E3, delay 1S and U3 disconnects.</p>
monitoring function	<ol style="list-style-type: none"> when the product is working, if the switching function mode, the product will stop working and enter the function protection, at the same time, all the red indicator lights flash, suggesting that the function failed, at this time, the user needs to restart the power supply, the product will perform the corresponding function. In the corresponding mode of operation, if the high water level / low water level / full water / lack of water alarm probe is not connected in the correct order, the product will also send out the corresponding alarm, the user needs to correct the wiring order of the probe in order to make the product work normally. 	

Working Principle

YX6 Series Liquid Level Control Relays detect and control levels of conductive liquids (tap water, seawater, sewage, chemical solutions, coffee, ice cream, etc.). The conductive properties of the liquid complete a circuit between a probe and common when the liquid comes in contact with both. These relays compare the value of the measured resistance between probes with the setpoint of the adjustable potentiometer provided on the product. The output of the relay is used to control pumps, solenoids or valves to lower, raise or maintain the level of the liquid in the tank. Probes are pulsed with a DC voltage to prevent potential electroplating issues.

HINTS ON CORRECT USE

Prior to power application, check the following

- Be sure to use the float less level switch for the correct applications at the correct supply volt-age.
- Check the wiring against the circuit diagram provided in this instruction manual.
- Be sure to ground the ground terminal.
- Check whether the electrodes contact each other in the liquid. If they do, separate the using a separator optionally available.
- Avoid placing the connection of the electrodes where liquids other than that to be sensed such as rainwater, exist.
- Adequately tighten the nuts of the electrodes.
- Prevent any foreign objects from collecting on the electrodes.
- The level switch cannot be used to sense substances with high specific resistance such as oil.

If you experience problems, do not immediately return the unit to the store.

Email the Helpline: SUE@yaoxuele.com

Qualified Customer Support Coordinators will be to assist in resolving your query.



WENZHOU DERREK ELECTRIC CO.,LTD.

Zhiguang Industry Zone, Liushi Town, Yueqing, Wenzhou City, Zhejiang Province, China

[Http://www.yaoxuele.com](http://www.yaoxuele.com) [Http://www.yoshine.vip](http://www.yoshine.vip)

E-mail: Sue@yaoxuele.com