



# **Leak Alarm Controller**

**WB-CLK100**

**User Manual**

**V1.0 May 2017**

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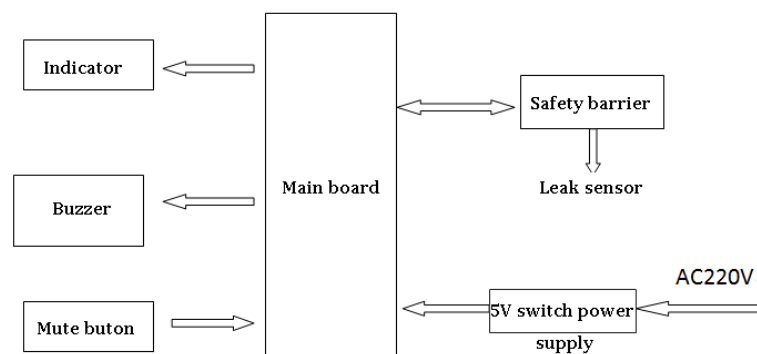
## 1. Product introduction

The leak monitoring system is mainly consisted of leak sensor, leak alarm controller and related accessories.

The system can monitor leakage of double-wall tanks in real time, also have sound-light alarm function, and is specifically designed to monitor the leakage of oil and water in the interlayer of double-wall tanks and double-wall pipelines.

Once there is a leakage occurs in the interlayer, the sensor will be triggered, the leak alarm controller will receive a signal from sensor, it will automatically determine leakage information and then give a lighting display and sound light alarm.

According to the alarm, user can make a timely response and take measures to avoid the occurrence of potential hazard and environmental pollution.



## **2. Product features**

- Compact structure and artistic appearance
- Easy to install and maintain
- Explosion-proof design, safe and reliable
- Monitor up to 8 leak sensors
- With mute button, can eliminate sound alarm when alarm occurs but do not affect light alarm

## **3. Technical parameters**

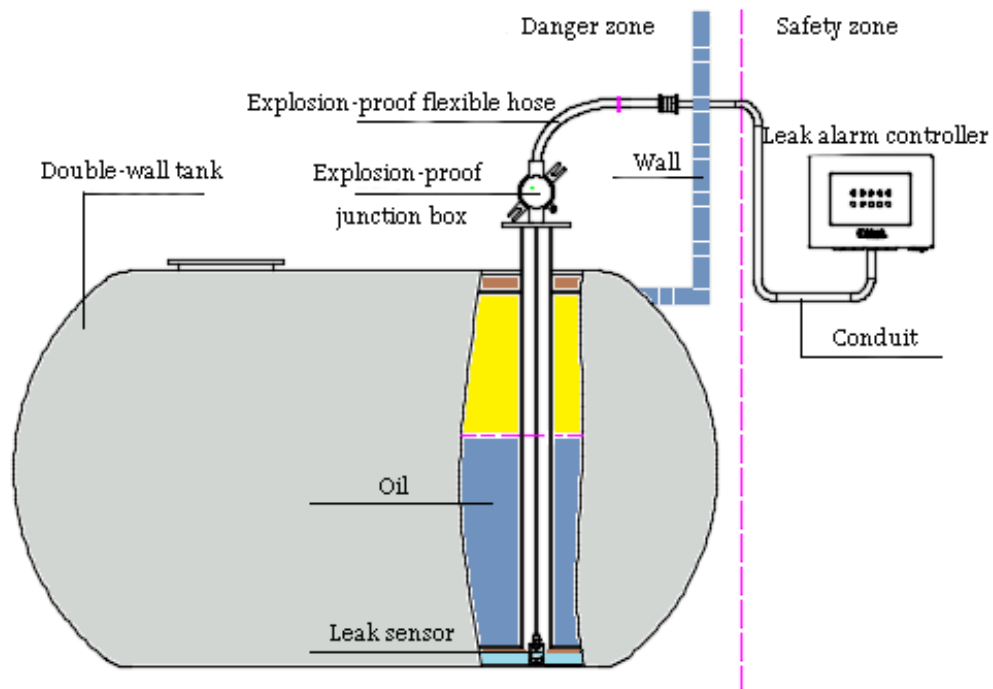
- Power supply: AC220V, 0.2A
- Working temperature: -20°C ~ +60°C
- Installation position: safety zone
- Safety barrier: Windbell GSB05
- Alarm mode: sound and light alarm
- Explosion-proof mark: [Exia Ga] II A
- Standard cable length: 3.5m
- Overall dimension: 280\*210\*100mm
- Weight: 2.7kg

## **4. Precautions for installation and use**

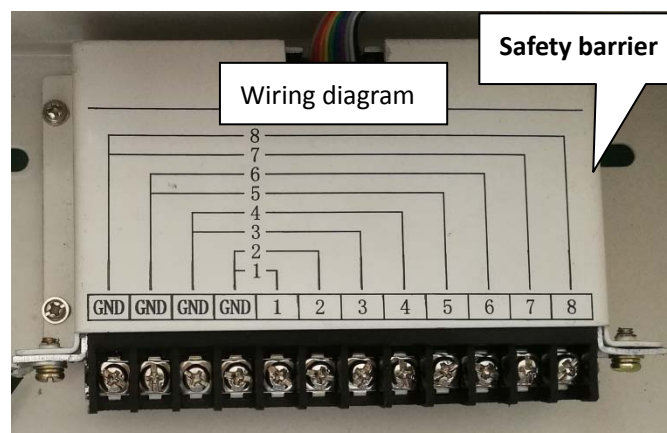
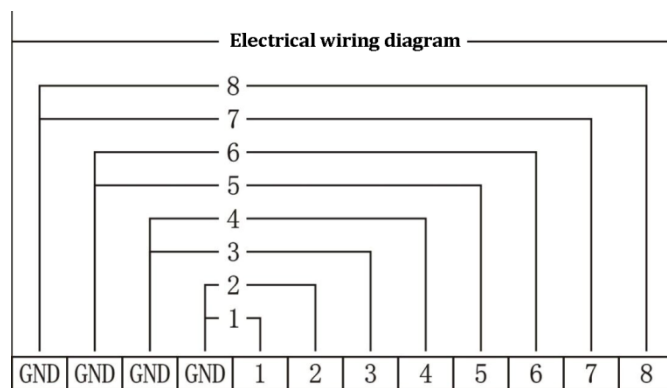
- Make sure the shell of controller is grounded firmly.
- Connecting leak sensor according to the corresponding order of wiring interface.
- Before power on, make sure the connection is correct.
- The installation shall be done by the unit who has already obtained the qualification to install, use and maintain the explosion-proof electrical equipment.
- The installation, use and maintenance of products shall strictly comply with the provisions of the product user manual and related standards, otherwise the consequences should be borne by themselves.

## 5. System installation

### 5.1 Site wiring diagram



### 5.2 Electrical wiring diagram



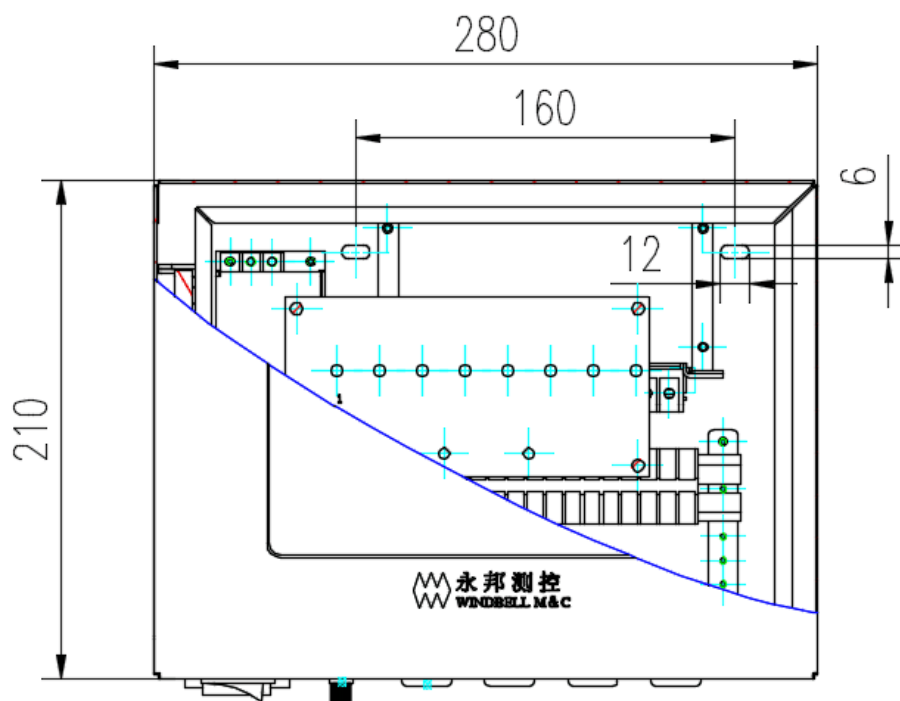
#### Notice of wiring:

- One safety barrier can connect with 8 sensors.
- Do the wiring according to the numeric order, from 1 to 8, in sequence. 1 correspond to No. 1 sensor, 2 correspond to No. 2 sensor, 3 correspond to No. 4 sensor, ..., 8 correspond to No. 8 sensor.
- Two sensors share one GND.

#### eg:

if have 1 sensor, shall connect with 1 (only with 1, not 2 or 3 or 4...) and GND; if have 2 sensors, one sensor can connect with 1 and GND, the other shall connect with 2 (only with 2, not 3, or 4, or 5...) and GND.

### 5.3 Mechanical mounting dimensions



### 5.4 Installation technical requirement

- Do the wiring correctly, make sure the connection is good.
- After wiring, tighten the cable lock to prevent cable from loosening.
- Each cable shall be provided with a unique identifier for identification, inspection and maintenance conveniently in the future.

## 6. Operation

### 6.1 Set the number of leak sensor

- Before starting the system, please set up the dial switch according to the number of leak sensors. For example, if one controller is connected to 4 leak sensors, we need to set up the dial switch according to No. 4 diagram, see figure 1 below.
- The default number of leak sensor is 1, and the default dial switch setting please see figure 2 below.

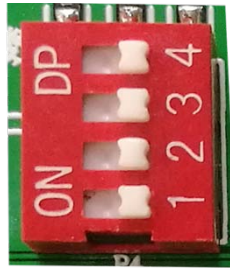


Figure 1



Figure 2

### Operation instructions of dial switch



- ✧ In the dial switch, the white square button is the toggle part of the dial switch.
- ✧ In the dial switch, No.1,2, and 3 are the setting switches, No.4 is the spare switch, do not need to set for temporary.

### Schematic diagram of dial switch setting

1 sensor	2 sensors	3 sensors	4 sensors	5 sensors	6 sensors	7 sensors	8 sensors

### 6.2 Monitoring condition instruction

- Indicator shows green indicates that the corresponding leak sensor is working normally, no fuel leak out.
- Indicator show red indicates that the corresponding leak sensor has already detect the leakage of fuel, and the buzzer will alarm.

### 6.3 Alarm instruction

Once leakage occurs, the buzzer will alarm; Click the mute button, the alarm sound will stop, but the red color of the indicator will keep until the leakage fuel is clear and no more leak out. If the status changes but fuel still leak out, the alarm sound will be active again.

## **7. Warranty and maintenance**

- The warranty of the product is 12 months since installation or 18 months since B/L date which occur earlier.
- The product failure under normal working condition is guaranty.
- Damages caused by artificial and natural disasters are not covered by the warranty.
- Once product failure occurs, please contact with Windbell, and do not repair without authorization, to prevent the occurrence of safety accidents.
- If you cannot troubleshoot the failure at site, please also contact Windbell for further procedures.



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