Operation Manual of Water Leakage Detector

AD-AS-1CM

First of all, thank you very much for purchasing the Water Leakage Detector AD-AS-1CM.

When using, please make confirmation according to the following items before carrying out various operations.

Using Method

- ■Connections with the power source, sensor and non-voltage contact output, and setting of the detection precision
- □ Power source

Please connect the AC100V or 200V (50/60Hz) to the power source terminal wire securely according to the figures below.

(Note) Do not connect AC200V to the AC100V terminal! Otherwise, it may lead to device malfunction or fire.



□ Water leakage sensor

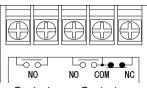
Please connect the water leakage sensor, which is installed with the break detection terminal (ZT-2) manufactured by our company, to the "SEN" terminal securely.



☐ Non-voltage contact output

Provided with 1 group of 1a and 1c non-voltage contact output respectively which are activated when the water leakage is detected.

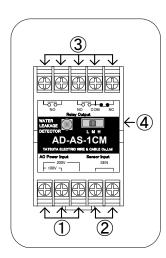
Make connection when external control is required.



Contact a Contact c

NO: relay contact during water leakage Closed

NC: relay contact during water leakage Ope



□ Detection precision setting

Detection precision can be set with respect to the installation environment, sensor length and the water quality detected accordingly.

Use the slide switch to select positions L, M and H for setting. The default setting when dispatched from the factory is M.



Slide Switch

H: high precision...8kΩ±30%

M: standard precision…5k $\Omega\pm30\%$

L: low precision...2KΩ±30%

■ Operation confirmation

The indicator LED will light up when the power source is turned on.

The water leakage status can be simulated via short circuit among the "SEN" terminals.

At this moment, the indicator LED will light up, indicating that the water leakage has been detected, meanwhile, the non-voltage contact output will be activated.

In addition, the leakage status detected by the sensor can be confirmed by dripping into running water into the sensor.

Afterwards, the alarm can be reset by wiping the sensor with a dry cloth.

Installation Method and Handling Precautions

- ·Use the detector in an environment with a temperature range between -10°C and 50°C (no icing) and a humidity range between 35% and 85% (no condensation).
- · Do not use the detector in any location close to sources of vibration and harmful gas, and strong electromagnetic inductive power sources.
- · Avoid using the socket lead as the power source as far as possible, and use fixed wire to connect power source. Select and use different fixators to fix the sensor according to the installation locations and environment.
- ·The structure of sensor is not easily affected by the electromagnetic induction, in case that you are worry about electromagnetic interference, please consult us.
- ·Be sure to make operation confirmation after the installation is completed.
- ·When the housing and the case body is found dirty, please use soft cloths such as the gauze with small amount of neutral detergent diluted by water to wipe gently.

Specifications

Item	Specification		
Power source	AC100/200V ±10% 50/60Hz		
Sensor electrode voltage	AC5.3V (maximum value)		
Water leakage detection level	Switchable 3 segments $\pm 30\%$ for L: $2K\Omega$, M: $5K\Omega$ and H: $8K\Omega$ respectively.		
Power consumption	2VA or less		
Indicator LED	Dual purpose for power source/water leakage alarm (lighting up when water leakage is detected)		
	1 group of 1a and 1c respectively		
Non-voltage contact	Rated load	Resistive load	Inductive load
		AC125V 0.5A	AC125V 0.3A
		DC30V 2.0A	DC30V 1.0A
	Maximum load	AC125V 1.00A	AC125V 0.50A
		AC200V 0.55A	AC200V 0.30A
		AC250V 0.45A	AC250V 0.24A
		DC30V 2.00A	DC30V 1.00A
		DC220V 0.25A	DC220V 0.14A

Maximum load: the maximum value of the load capacity switchable. When using, do not surpass this value.

For Safety Use!



- ■To avoid the occurrence of malfunction!
- \star Do not touch this detector with wet hands
- *Do not insert foreign matters into the detector from the gaps
- *When carrying out maintenance and periodic inspection to the detector, follow the instructions of the person in charge of operation or the operation manual.

Caution Label

Erroneous operation of this water leakage detector not complying with the warning labels or the following warnings may not only lead to possible fatality or serious injury, but also fire, electric shock or detector failure.

Before using, please be sure to read the precautions and the operation manual carefully



Caution labels



- □ Carry out installation or wiring following the method instructed in the operation manual.
- □Conduct maintenance and periodic inspection following the method instructed in the operation manual.
- $\hfill\Box \mbox{Confirm}$ the rated voltage and supply voltage before installing the machine.
- □ Never soak it in water! Avoid installing the detector in any location subject to high temperature and high humidity.
- □When assembling to the machine for use, don't install in any locations easily accessible to the general public.
- □Avoid using the detector in any location subject to excessively dusty environment.
- □Avoid using the detector in any location close to sources of vibration, organic gas or strong electromagnetic induction.
- $\ \square When \ performing \ maintenance \ on \ this \ detector, \ don't \ use \ solvents \ such \ as \ alcohol, \ toluene \ and \ diluents, \ etc.$
- $\hfill\square$ Never modify or disassemble the detector.
- $\hfill\square$ Do not use the sensor as electric wire!
- □ Please contact us in case of any failure.

Customer Consultation

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