

To: \_\_\_\_\_

## Specification Document

Water Leakage Detector  
AD-AS-1CM  
(RoHS-directive-compatible)

Date : (                      )

<Manufacturer >

System Equipment Division  
Electronic Materials & System Equipment Group  
TATSUTA Electric Wire & Cable Co., Ltd.

System Equipment Division		
Approved by:	Checked by:	Prepared by:

## <<<Important safety instructions>>>



### Warning

Erroneous operation of this water leakage detector not complying with the warning labels or the following warnings may lead to fatal accident, serious injury, electric shock, fire, or detector failure.



### Warnings



#### Strict Prohibitions

- Never modify or disassemble the detector.
- Allow only persons responsible for handling this product to perform installation work on it or to adjust or inspect it with the outer cover opened.
- Observe ratings of power supply voltage and contact capacity.  
\* Application of AC 200 V to the AC 100 V terminal will destroy the detector.
- After the detector is installed, do not leave it with the cover open, except for inspection and maintenance purposes.
- Do not touch any internal component with wet hands.
- When performing maintenance on the product, avoid using organic solvent. Use dry wiping rags or a small amount of diluted neutral detergent.



#### Checkpoints

- Check detector supply voltage and rated voltage before installing.
- When installing and electrically connecting the detector, follow the instructions in the instruction manual.
- When inspecting and maintaining the detector, follow the instructions in the instruction manual.
- When using control output contacts, check the contact rated load in the instruction manual.



#### Do not install the detector in the following locations!

- Locations easily accessible to the general public
- Locations close to sources of vibration, organic gas or strong electromagnetic induction.
- Locations with much waste and dust
- Locations where there is possibility of water leakage and temperature and humidity are high

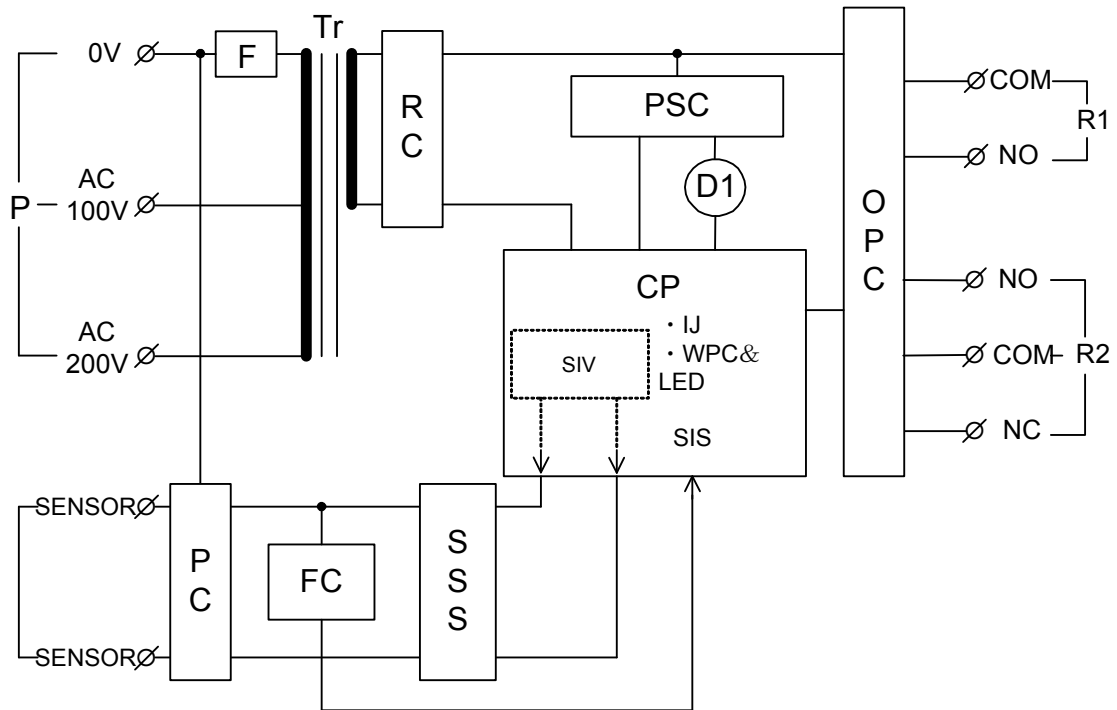
## Table of contents

	Page
1. Scope of application.....	1
2. Construction .....	1
3. Specifications .....	2
4. External Connection .....	2
4-1 Connection of power supply and sensor .....	2
4-2 Connection of non-voltage output .....	2
5. Movement chart .....	3
◇ Attached Drawing 1: Outward form	

1. Scope of application

This specifications covers Water leakage detector AD-AS-1CM that was developed to incorporate in some equipment.

2. Construction



P : Power(AC100/200V 50/60Hz)

F : Fuse

Tr : Trans

D1 : LED · Power Supply Disply(Lighting)  
· Water Leak Warning Disply(Flicker)

R1 : Output Contact(a)

R2 : Output Contact(c)

RC : Rectifier Circuit

OPC : Output Circuit

PSC : Power supply stability circuit

PC : Protection circuit

FC : Filter circuit

SSS : Sensitivity setting switch

SIV : Sensor impression voltage output

CP : Control part

IJ : Input judgment

WPC&LED : Warning point of contact & LED output

SIS : Sensor input signal

## 3.Specifications

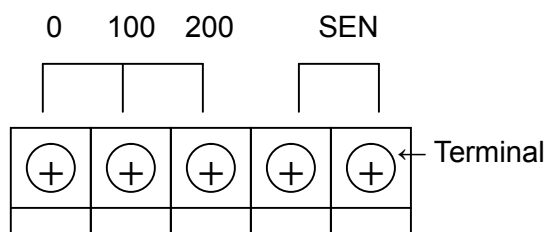
Item	Specification
Power supply	AC100V or AC200V
Frequency	50/60Hz
Power consumption	Not more than 2VA
Non-voltage output terminal contact capacity	AC125V 0.3A DC 30V 1.0A
Non-voltage output terminal construction	1c(COM-NO,COM-NC) 1a(COM-NO)
Voltage across sensor	AC5V
Ambient temperature	- 10~50□(Don't freeze.)
Ambient humidity	35~85%RH(There must be no dew condensations.)
Number of sensor circuit	1
Water-leakage detect level	L:2kΩ±30% M:5kΩ±30% H:8kΩ±30%
Water-leakage return level	L:4kΩ±30% M:10kΩ±30% H:16kΩ±30%
LED(Red) lamp display	Power ON : Lighting Water-leakage : Flicker
Overall dimensions	72mm(H)×45mm(W)×67mm(D) ±1mm (Refer to attached Fig.1)
Weight	Approx.150±10g

## 4.External Connection(Refer to attached Fig.1)

## 4-1.Connection of power supply and sensor

When you connect power supply, please confirm the voltage AC100V or AC200V. And please connect power supply to each terminal indicated at "0 100" or "0 200".

Next, please connect a sensor at "SEN" terminal.

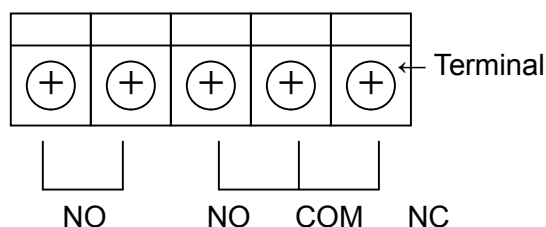


## 4-2.Connection of non-voltage output

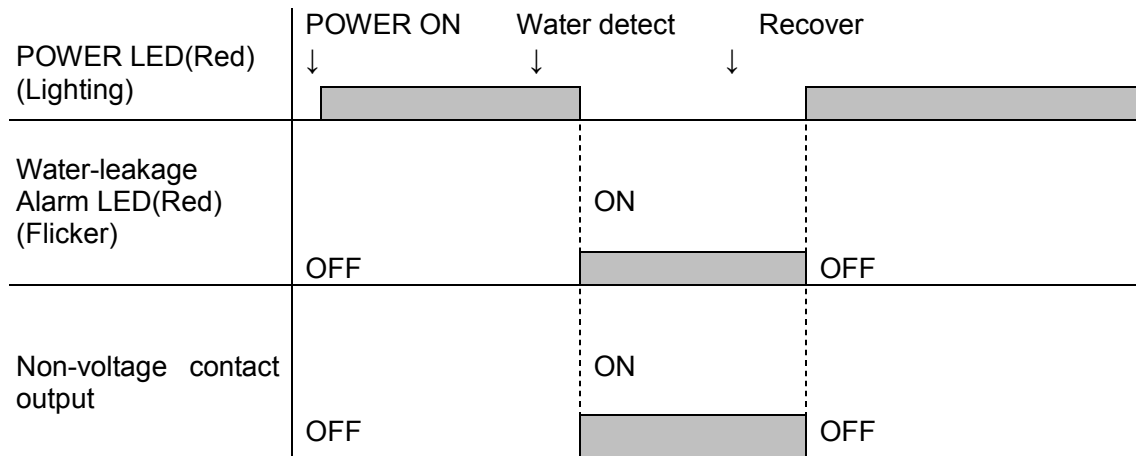
When you need external control, please use non-voltage output terminal shown in underneath.  
(Contact capacity : AC125V/0.3A · DC30V/1.0A)

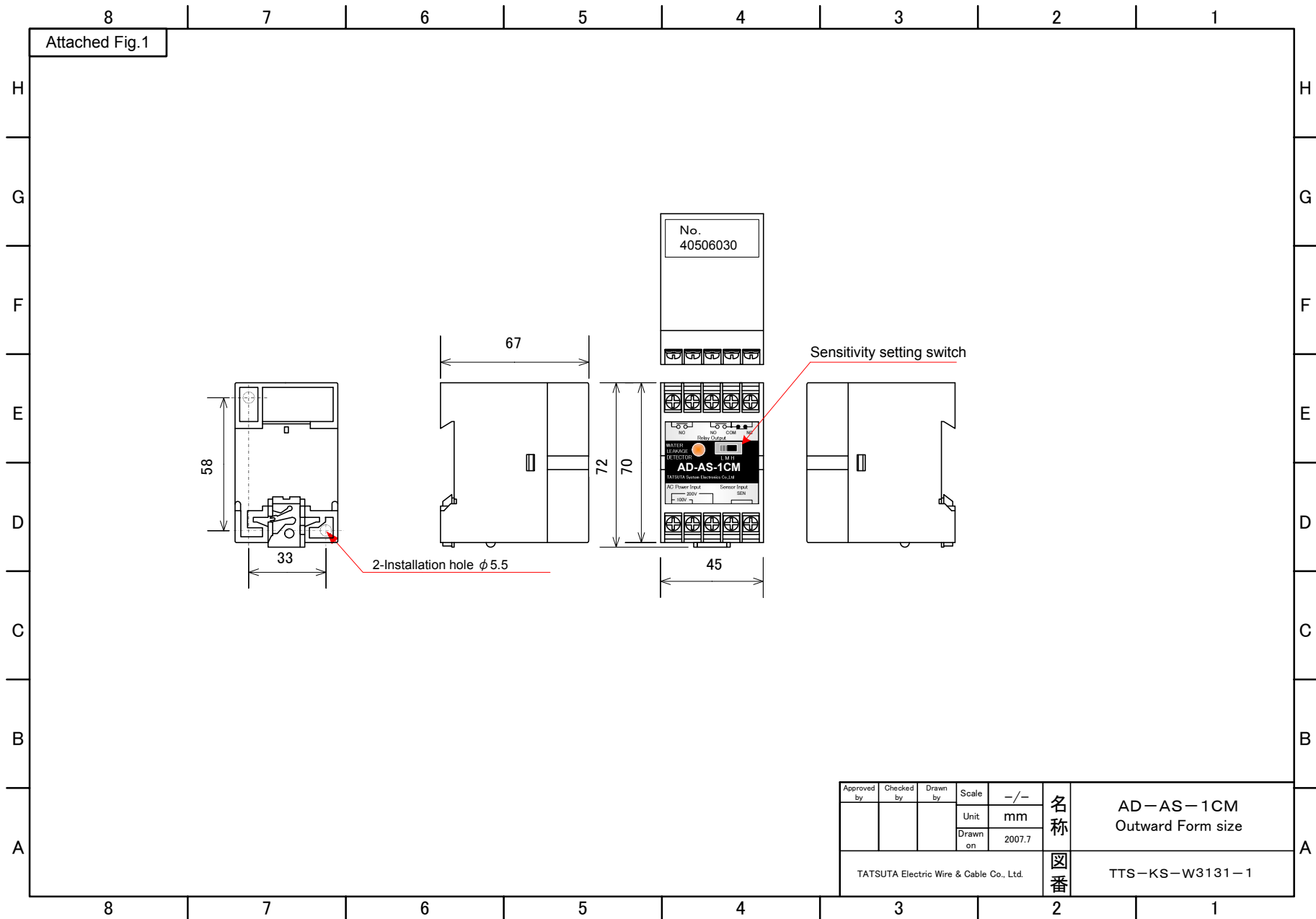
NO and COM-NO : When water leakage occur, this contact is close.

COM-NC : When water leakage occur, this contact is open.



5.Movement Chart





Approved by	Checked by	Drawn by	Scale	-/-	名称	AD-AS-1CM Outward Form size
			Unit	mm		
			Drawn on	2007.7		
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