

# Floatless Level Switch

## Model FS-3 MANUAL



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### INSTRUCTION MANUAL

This manual primarily describes precautions required in installing and wiring the temperature controller. When using the temperature controller, please refer to the pertinent catalog for detailed information.

#### MAIN PRODUCTS

- DIGITAL: Temperature Controller, Counter/Timer, Tachometer/Panel Meter
- SENSOR: Proximity Switch/Photo Electric Sensor, Rotary Encoder/Optical Fiber Sensor, R.T.D/Thermo Couple
- ANALOG: Timer/Temperature Controller

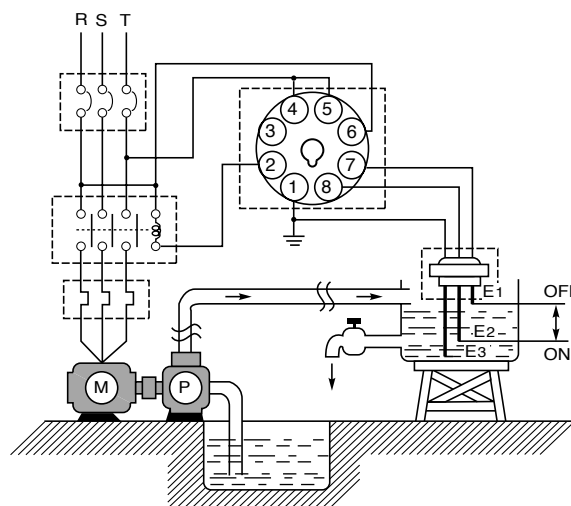
## 1 RATING AND CAPACITY

CLASSIFICATION	FOR LOW SENSITIVITY	FOR HIGH SENSITIVITY
Power supply	220VAC, 50/60Hz	
Operation voltage	±10% of power supply	
Secondary voltage	8VAC	24VAC
Power consumption	Approx. 3.2VA	
Response time	WORKING : The less than 80ms RESET : The less than 160ms	
Interelectrode operating resistance	0 ~ Approx.7KΩ	0 ~ Approx.27KΩ
Interelectrode release resistance	Approx.15KΩ ~ ∞ Ω	Approx.38KΩ ~ ∞ Ω
Control output	250VAC 5A (Resistance load)	
Output relay life	Electrical: The more than 500,000 times (Resistance load) Mechanical: The more than 5,000,000 times	
Insulation resistance	The more than 100MΩ (500VDC M)	
Withstand voltage	2,000VAC 50/60Hz for a minute	
Ambient temperature	-10 ~ +50°C (Without ice condensation)	
Ambient humidity	35 ~ 85%RH	

### EXAMPLE

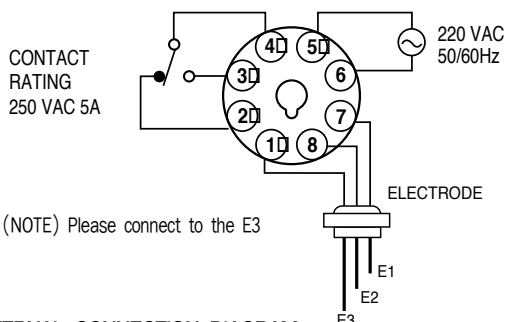
#### ① Case of water supply

The pump is stop when the surface of the water arrive at E1. And, the pump is play when the surface of the water make less than E2.



## 2 CONNECTION DIAGRAM

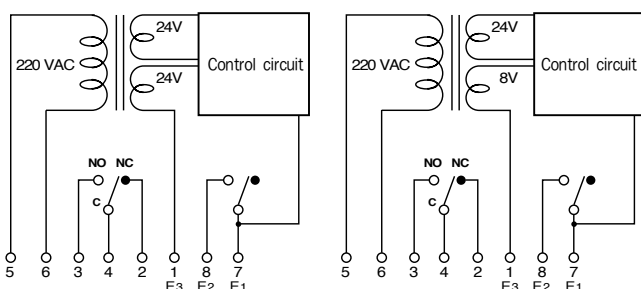
### EXTERNAL CONNECTION DIAGRAM



### INTERNAL CONNECTION DIAGRAM

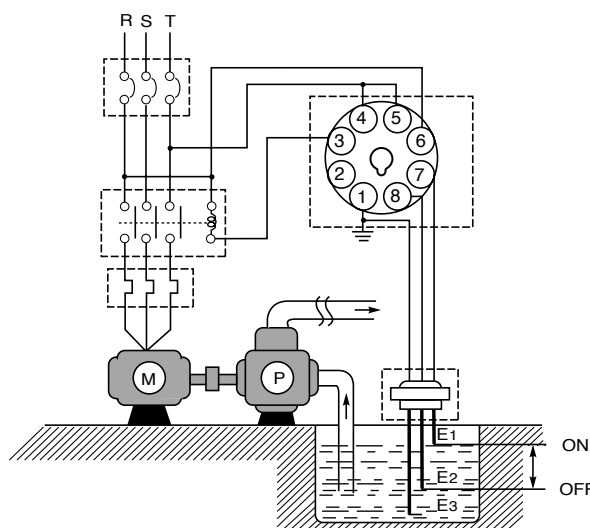
#### ① High sensitivity

#### ② Low sensitivity



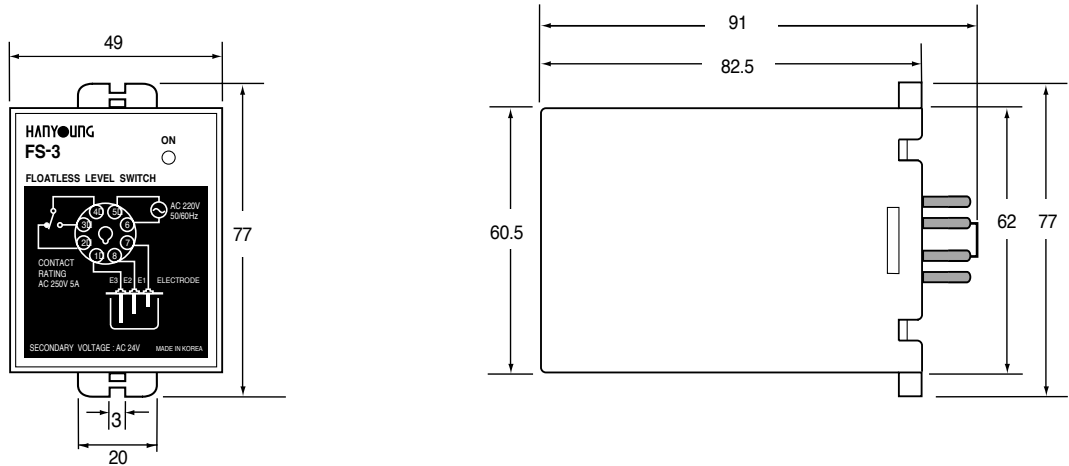
#### ② Case of draining

Opposite to the above



## 3

## EXTERNAL DIMENSION



(Unit : mm)

## 4

## ARTICLES UNDER SUSPICION

- Please connect to the assigned terminal after confirm to input power.
- Do not use a overload of the more than rating in the consist of output relay contact.
- Please make shorter as possible the wiring length of between electrode and instrument.
- The wiring of between electrode and instrument should be used a thick wiring as possible.
- Do not establish at a place that temperature or humidity are high.