

Tilt Power Controller (Self-Hold type)

Item No.	TPC010110	Description	Tilt Power Controller	Version	1
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● Functions

1. Tilt Angles 45° detecting power control within a 360° radius.
2. Suitable for vertical installation.
3. Tip over detecting and power shut off controlling.



● Application

1. Automatically power shut off for home appliances or sporting equipment.

● Function illustration

1. Automatically power shut off

After power on, when the controller tilts over a degree it will shut off the output power supply.

2. Safety protection after recovering from tilt situation

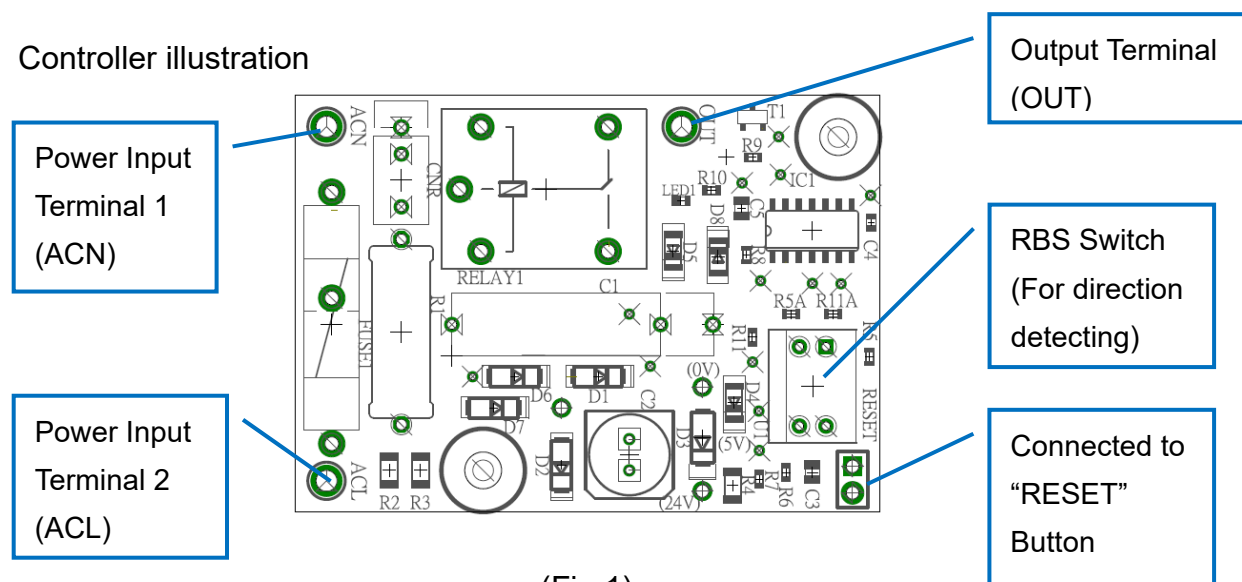
After power on, when the controller tilts over a degree it will shut off the output power supply. When the controller recovers from tilt situation, the output power is still shut off until the user pushes the “reset” button.



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● Controller illustration

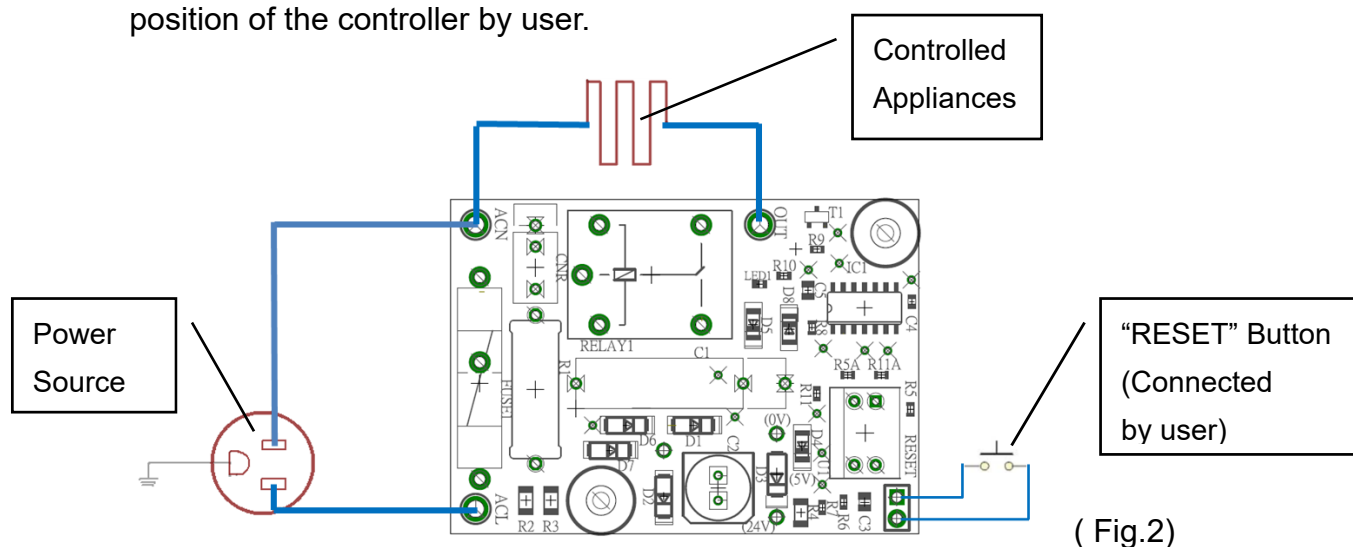


(Fig.1)

● Wiring

As shown in Fig.2, the power source is connected to the two input terminals “ACL” and “ACN”. The power input of the controlled appliance is connected to the terminal “ACN” and “OUT” respectively.

Besides, an external normal open type push-button is must for wiring to the “RESET” position of the controller by user.



(Fig.2)

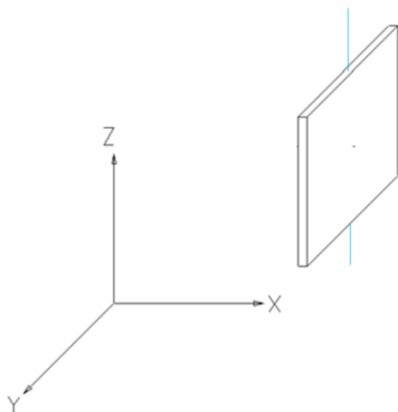


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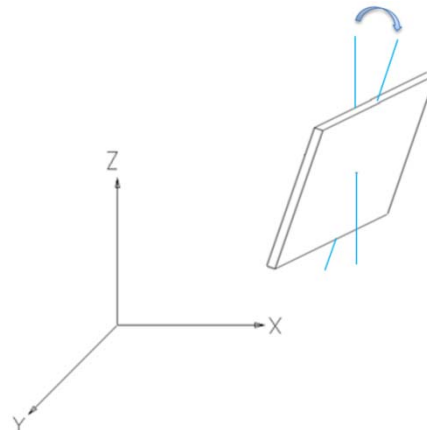
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● Actions and output status

- Only after wiring correctly, the user can energize the controller. (Shown in Fig. 2)



(Fig. 3)



(Fig. 4)

- After energizing the controller, when the controller tilts less than 35° from vertical direction (shown in Fig.3), the controller will be regarded as in normal position. The controller will supply power to the controlled appliance.

When the controller tilts more than 55° from vertical direction (shown in Fig.4), the controller will be regarded as in abnormal position. The controller will shut off the power supply to the controlled appliance. In the meaning time, the self-holding circuit in the controller will be started.

- After the self-holding circuit being started, the controller will keep in “shut off” status and stop power supply to the controlled appliances. Even when the abnormal condition has been ruled out and returned to the original correct position, the circuit is still kept in the “shut-off” status.

Only until the user pressing the RESET button, the self-holding circuit will be released and recover the power supply to the controlled appliances.

- In any time, shutting off the power and reenergizing the controller will release the self-holding circuit.



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● Electrical Characteristics

Technical Requirements	
Model No.	TPC010110
Input Power Voltage	AC 110V
Input Power Frequency	F=50~60 Hz
Output Power Voltage/ Frequency	(Same as input Voltage/Frequency)
Maximum Current	10.0A
Maximum Loading (Watt)	1200 W
Static power consumption	$\leq 6W$

● Absolute Maximum Rating (Ta=25°C)

Operating Temperature	Topr	-25~+85	°C
Storage Temperature	Tstg	-40~+85	°C

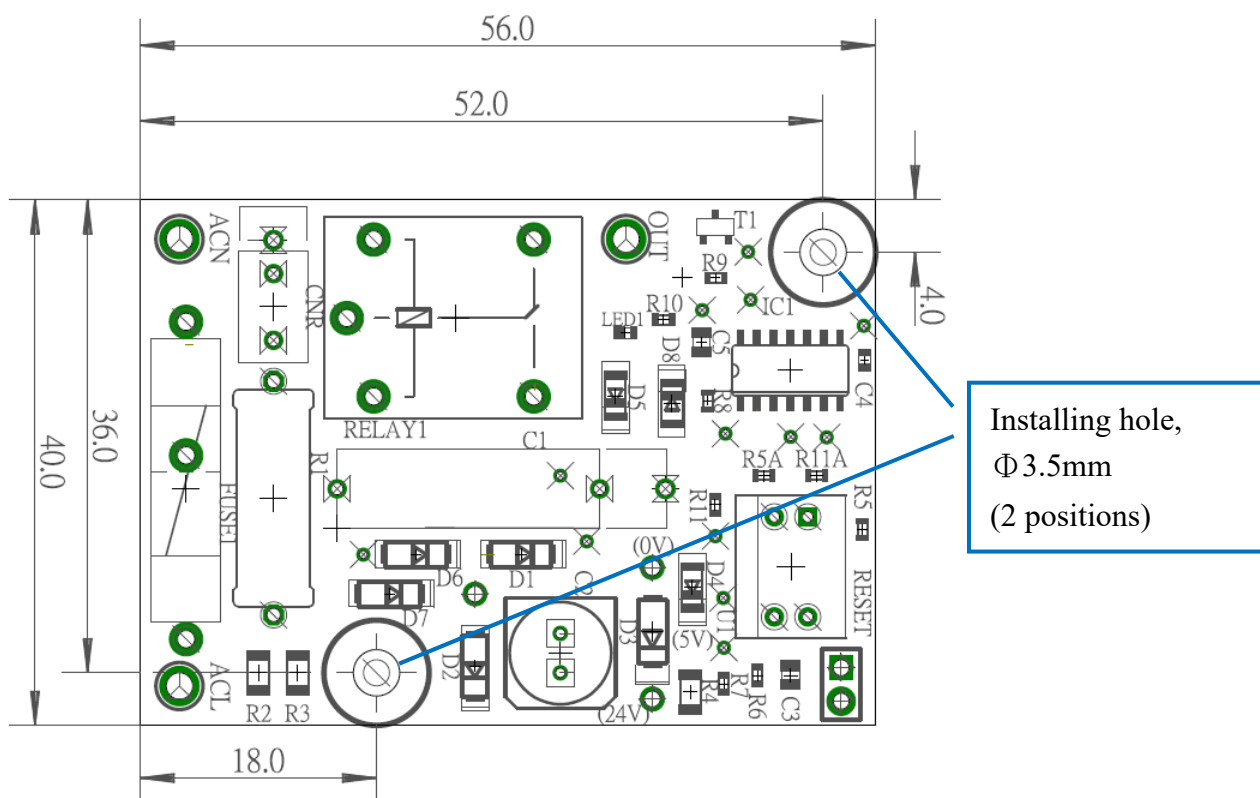


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- Dimensions / Pin Position (Unit: mm, Tolerance: $\pm 0.25\text{mm}$)

Dimensions of the module (Temporary) : 56(L) * 40(W) * 20 (H) mm



(Fig. 5)



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● PACKAGE

	Part Number	Package	Quantity	Total	Dimension (mm)
1.	TPC010110	Bubble bag	1 pcs	1 pcs	80L*50W*25H
		Inner Box	50pcs	50 pcs	348L*191W*85H
		Carton	3 Boxes	150 pcs	364L*278W*213H

※ Package shown as below for reference.(Temporary)



Bubble bag



Inner box



Carton

● NOTES

1. For the continued product improvement as one of the company policy, specifications may change or update without notice. The latest information can be obtained through our sales offices. Normally, all products are supplied under our standard conditions.

● PRECAUTIONS FOR USE

1. If the products is intended to be used for other endurance equipment requiring higher safety and reliability such as life support system, space and aviation devices, disaster and safety system, it's necessary to make verification of conformity or contact us for the details before using.
2. Please do not exceed the rated load as there will be a risk of disabling the product function.
3. In the circuit, the "RBS switch" should not be near the magnetic component (for example: transformers, etc.).
4. There is AC current in this module. Recommended to use protection to avoid electric shock.

