Product Descriptions

PIR Occupancy Sensor Switch
(No Neutral Required)

Model #: BRT-300C

(Please visit our website www.a-brt.com for more info)

Features:

BRT-300C is an occupancy sensor switch which utilizes passive infrared (PIR) sensor to detect the heat (in the form of infrared energy) from people moving within a space. It can determine when a space is occupied and turns on or turns off the loads automatically. It is designed for easy installation and retrofit, directly fit into standard wall box with no need for the neutral.

- Load power up to 2000W;
- Adjustable delay-off time from 2 minutes to 60minutes (8 settings available);
- Ambient light override. Automatically measures the ambient light level, and there is no trigger on above a light level adjustable by users;
- Good for all kinds of loads (an additional adapter required for capacitive lights such as CFL);
- ABS-V0 flame resistance material; and
- Classical 86 series design and high quality build.

Front View and Back View:

Fig. 1 and Fig. 2 show the front view and the back view of the BRT-300C PIR occupancy sensor switch respectively.

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Fig. 1 Front View **Fig. 2** Back View

Specification Parameters:

Input Voltage	220～240V(50Hz/60Hz)	Operation Environment	No-condensation 20-90% RH，-20℃～40℃
Wattage	Resistive: 2000W Capacitive: 1000W Inductive: 1000W	Working Range	Up to 7m in a cone of 120 degrees
Mounting Hole Spacing	60mm	Matching Box	75mm x 75mm x 50mm
Dimension	86mm x 86mm x 43mm	Weight	125g

Wiring Diagram and Installation Guide:

BRT-300C occupancy sensor switch only requires two wires for installation:

Hot wire (ACL): Coming from the power line with 220V; and

Load wire: Going to the load.

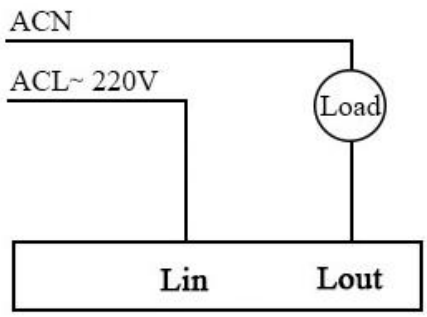

Fig. 3 BRT-300C Wiring Diagram

Warning: ***Please make sure power is turned off before starting installation!***

Fig. 3 shows the wiring diagram and Fig. 4 shows the step-by-step installation instructions. There are three easy steps:

Step one: Use a screwdriver to pry off the front plate in position A;

Step two: Wiring according to the diagram and the labelled ports of the switch; and

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Step three: Install screws and front plate.

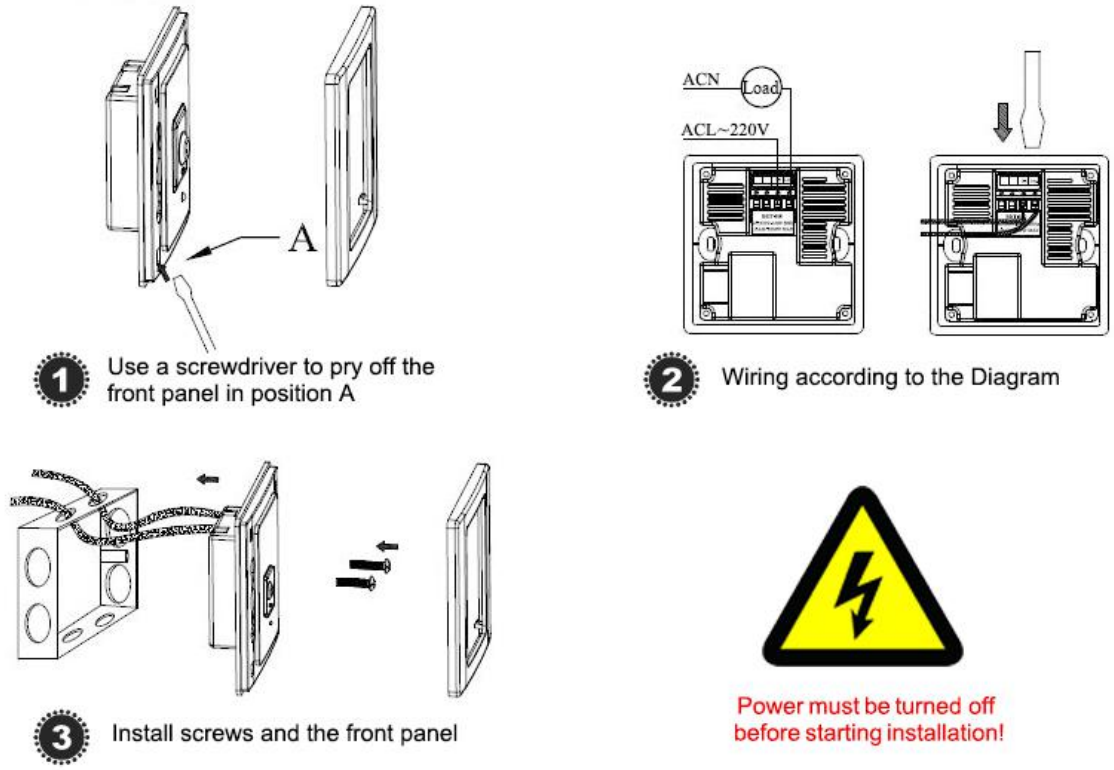

Fig. 4 BRT-300C Installation Guide

Warnings:

1. Please make sure power is turned off before starting installation!
2. Load shorting or using a load with a power rating higher than the specified wattage of the sensor switch is prohibited.

Cautions:

1. Avoid mounting the sensor switch close to air vents, as the vibration and air flow can reduce the effectiveness of the sensor switch;
2. Avoid installing the sensor switch in an electrical circuit which has other frequent on/off switch or appliance, as those on/off actions could cause false triggers.

BRT-300C Operation Guide:

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BRT-300C PIR sensor switch needs a warm-up time about two minutes before it can operate properly. It has a precision tuning screw to adjust the ambient light override threshold as shown in Fib. 5. It also has dip switches to adjust the delay off time as shown in Fib. 2.

1. Adjust the ambient light override threshold

Please refer to Fig. 5. The fine tuning screw is used to set the ambient light override threshold. Use a screw driver to tune the screw gently.

Caution: The tuning screw can not make a full turn. To avoid possible damage to the screw, please do not use strong force to tune it.

a. Counter-clockwise to "+": increase the threshold, so that the PIR triggers will be overridden in bright lighting condition; and

b. Clockwise to "-": decrease the threshold, so that the PIR triggers will not be overridden in dark lighting condition.

Fig. 5 Adjustment of Ambient Light Override Threshold

2. Adjust the delay off time

There are 4 dip switches on the back of BRT-300C which are used to set the delay off time to 8 settings based on different combinations. Fig. 6 shows all the dip switches are in "off" positions. Each combination corresponds to a delay off setting.

0001	delay off time = 2 minutes
1000	delay off time = 5 minutes
0100	delay off time = 10 minutes
1100	delay off time = 20 minutes
0010	delay off time = 30 minutes
1010	delay off time = 40 minutes

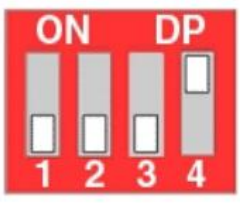

Fig. 6 Dip Switches in 0001 Positions

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0110 delay off time = 50 minutes

1110 delay off time = 60 minutes

0 = off and 1 = on

(Other factory settings are available. Please talk to our sales representatives).

Applications:

BRT-300C PIR occupancy sensor switch has very high power rating. It can be used for automatically turning on and/or turning off various loads such as lights, fans, appliances, or other kinds of electrical equipment, especially good for high power loads.

BRT-300C PIR occupancy sensor switch is perfect for saving energy and bringing convenience and safety to our daily life and work. It has wide applications at various locations such as stairwells, corridors, washrooms, offices, conference rooms in homes, schools, laboratories, hospitals, offices, etc.

How to Order:

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