

# AXEM

Wind sensor - Wireless



 **ALLMATIC®**

MADE IN ITALY

CE

## REMARKS

**Please read this instruction manual very carefully before installing and programming your control unit.**  
**After the installation keep this instruction in a safe place for any further consultation.**

- The device must not be used by people (children included), whose physical, sensory and mental capacities are reduced, or without experience or knowledge, unless they could benefit through the intermediation of a person responsible for their safety, of a surveillance or of instructions related to the use of the device.
- Children must be kept under surveillance to make sure that they do not play with the device.
- If the power supply's cable is damaged, it must be replaced by the manufacturer or by his assistance service or in any case by a person with similar status in order to prevent any risk.
- This instruction manual is only for qualified technicians, who are specialized in installations and automations.
- The contents of this instruction manual do not concern the final user.
- Every programming and/or every maintenance service should be done only by qualified technicians.
- The installer must provide the installation of a device (es. magnetothermal switch) that ensures the omnipolar sectioning of the equipment from the power supply.

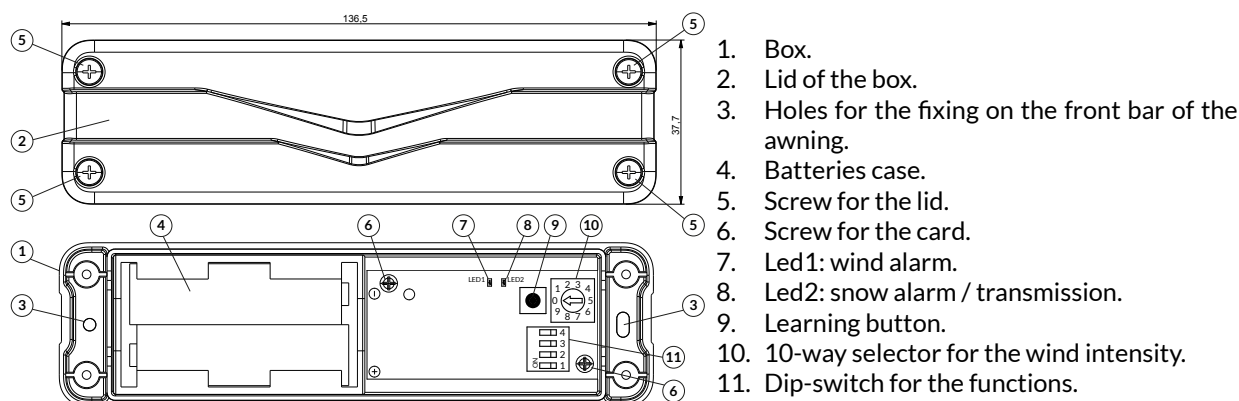
## 1 DESCRIPTION

The AXEM device is a climatic sensor suitable for the managing of awnings. The information collected is transmitted by radio, so are not necessary the connections between the control unit and the sensor. The device can work only with a compatible Allmatic control unit. The sensor is powered by 2 batteries 1,5V AA type. For the correct functioning will be necessary to program the sensor on the control unit. Please refer to this user manual and to the instruction of the control unit.

## 2 ASSEMBLING

Before the fixing of the sensor on the wall it is possible to make the learning and any tests keeping the sensor in the hand, in comfortable position, nearby the control unit. The settings and the data will be kept for all the time needed for the definitive fixing. The sensor must be fixed on the front bar of the awning to protect, up to a maximum distance of 20/25 meters far from the control unit. The maximum distance could change significantly in presence of metallic parts or shielding between the sensor and the control unit. Please, check the correct functioning of the sensor in all the positions of the awning.

*Note: any local devices (eg. wireless headphones), with the same transmission frequency, can interfere with the operation of the sensor.*



1. Box.
2. Lid of the box.
3. Holes for the fixing on the front bar of the awning.
4. Batteries case.
5. Screw for the lid.
6. Screw for the card.
7. Led1: wind alarm.
8. Led2: snow alarm / transmission.
9. Learning button.
10. 10-way selector for the wind intensity.
11. Dip-switch for the functions.

Instruction for assembling:

- Move the awning in the full opening position with the wired buttons or a transmitter memorized in the control unit.
- Fix the box ① on the front bar of the awning. Use the holes ③ (Figure A and Figure B). To obtain the optimum transmission signal, maintain the minimum distance of 2 meters from the control unit.
- Insert two batteries, 1,5V AA type, in the specific batteries case ④ (Figure C).
- Check the presence of the screws ⑥ used to fix the sensor card to the box ①.
- Activate the diagnosis mode of the sensor (DIP4: ON). The alarms are shown through the LEDs and they are not transmitted to the control unit.
- Shake the awning and check if the LED1 blinks (wind alarm). Adjust the desired wind intensity: set the selector ⑩ and/or the dip-switch ⑪. See paragraph 4. (Figure D)
- Deactivate the diagnosis mode of the sensor (DIP4: OFF).
- Memorize the sensor in the control unit. See paragraph 3.
- Shake the awning and check the closing for wind alarm. For the alarm timing, please refer to the user manual of the used control unit.
- Close the box ① with the lid ②. Use the screws ⑤.

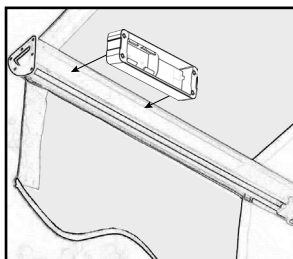


Figure A

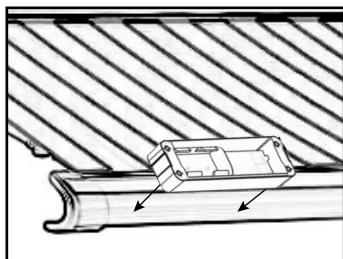


Figure B

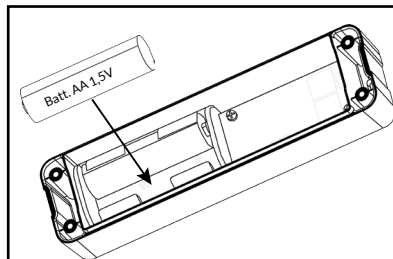


Figure C

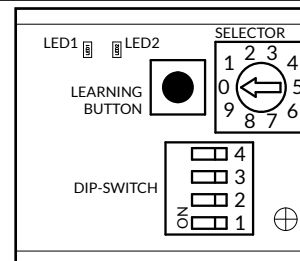


Figure D

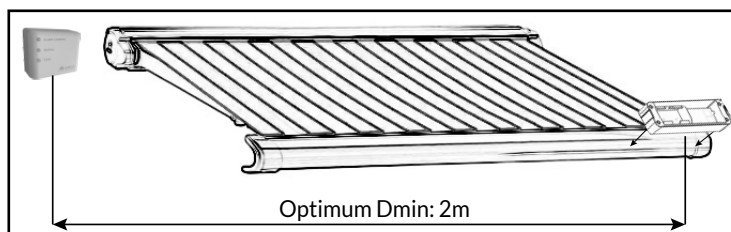


Figure E

### 3 LEARNING OF THE SENSOR

Each sensor can be memorized on one or more control units (inside the maximum range of 20-25 meters). For the learning procedure please refer to the instruction of the control unit. A short pression of the learning button on the sensor carries out the transmission: it is shown by the fast blinking of the red LED2.

### 4 SETTING OF THE SENSOR

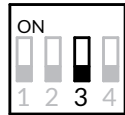
The sensor has a DIP-SWITCH for the function selection. See the following table for details:



DIP1 OFF  
Intervention with light wind.



DIP2 OFF  
Inclinometer deactivated.



DIP3 OFF  
Energy saving deactivated (maximum power and transmission frequency).



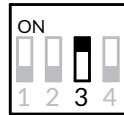
DIP4 OFF  
Diagnosis mode deactivated.



DIP1 ON  
Intervention with high wind.



DIP2 ON  
Inclinometer activated.



DIP3 ON  
Energy saving activated (reduced power and transmission frequency).

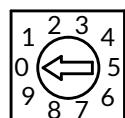


DIP4 ON  
Diagnosis mode activated.

#### 4.1 - ADJUSTMENT OF THE WIND SENSOR

The adjustment of the wind intensity in the sensor is carried out with the DIP1 and the 10-way selector.

**NOTE:** it is possible to adjust up to 20 different wind intensities with the combined use of the DIP1 and the selector. The minimum level is identified by the configuration with the DIP1 OFF and the selector set to 0 (the sensor intervenes with light wind), while the maximum level is with DIP1 ON and the selector is set to 9 (the sensor intervenes with high wind).



According to the selector position, it is possible to set up to 10 levels of wind intensity. The light wind is identified by the number 0, while the high wind is identified by the number 9.

After each change, press the learning button in the sensor to confirm the setting (it is not necessary with the active diagnosis mode). For the correct setting of the wind sensor, follow the procedure below:

1. DIP4: ON (diagnosis mode activated).
2. Set the desired wind intensity through the selector and/or the DIP1.
3. Shake the awning and check if the LED1 blinks (wind alarm). If the sensor detects a wind alarm (LED1 blinks) with oscillations lower than desired, increase the level of the set intensity with the selector. Instead, if the sensor does not intervene with the desired oscillations, decrease the set wind intensity.

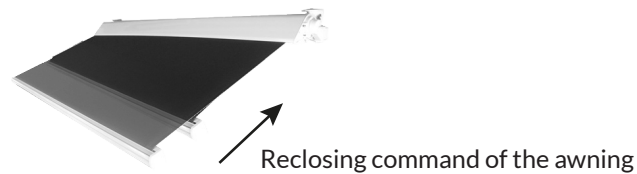
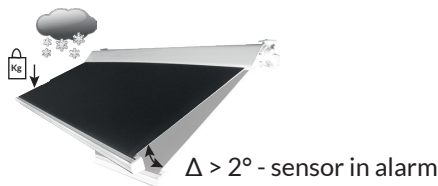
4. DIP4: OFF (diagnosis mode deactivated).

#### 4.2 - INCLINOMETER

The sensor is able to detect the inclination of the awning to identify a lowering due to the weight of the snow (or rain) that is deposited above. The variation of inclination is detected during the normal operation with a delay of about 10 minutes, so it is necessary that the sensor remains in the same position for about 10 minutes. The inclinometer can be used only with awnings that have the same inclination in all the positions.

For the correct setting of the inclinometer and to verify the possibility of use of the function with the installed awning, please follow strictly the procedure below:

1. Place the awning in any position.
2. DIP4: ON (diagnosis mode activated).
3. Press and hold the learning button.
4. DIP2: ON (inclinometer activated).
5. When the LED2 starts blinking, release the learning button.
6. When the LED2 switches to OFF, the inclination is memorized.
7. Arrange the awning in different opening positions and wait several seconds. Check if the LED2 lights up (alarm, tilt  $>2^\circ$  compared to the one already memorized):
  - if the LED2 blinks, it is **NOT** possible to use this function (inclination of the awning is not constant). Set the DIP2 on OFF.
  - if the LED2 never lights up, it is possible to use this function.
8. DIP4: OFF (diagnosis mode deactivated).



## 5 SIGNALLINGS

After having pressed the button, for 5 minutes, the device will emit light signals to indicate the status of the alarms or the presence of anomalous conditions

Description	LED 1 (AMBER)	LED 2 (RED)
Error	Fast blink (0,05s)	Fast blink (0,02s)
Test transmission	OFF	Fast blink (0,02s)
Test transmission with flat batteries	OFF	Pulsing blink (0,02s ON - 0,4s OFF)
Wind alarm	Blink (0,02s)	-
Snow alarm	-	Blink (0,2s)
Request of a reset	OFF	Slow blink (1s)

## 6 CHANGE OF THE IDENTIFICATION CODE OF THE SENSOR (ID)

To be done only in exceptional cases. The changing of the code will be necessary when there are two sensors working in the same area and they have the same ID; this operation permits to obtain a new ID generated randomly.

Press and hold the button on the sensor for more than 10 seconds, the led starts to blink slowly. When the led remains with the fix light, the changing of ID is completed and it is possible to release the button. Releasing the button before the end of the procedure will abort the ID changing.

**Attention:** after the ID change it will be necessary to repeat the learning procedure of the sensor on the control unit.

## WARRANTY

In compliance with legislation, the manufacturer's warranty is valid from the date stamped on the product and is restricted to the repair or free replacement of the parts accepted by the manufacturer as being defective due to poor quality materials or manufacturing defects. The warranty does not cover damage or defects caused by external agents, faulty maintenance, overloading, natural wear and tear, choice of incorrect product, assembly errors, or any other cause not imputable to the manufacturer. Products that have been misused will not be covered by warranty or repaired.

Printed specifications are only indicative. The manufacturer does not accept any responsibility for range reductions or malfunctions caused by environmental interference. The manufacturer's responsibility for damage caused to persons resulting from accidents of any nature caused by our defective products, are only those responsibilities that come under Italian law.