

# Luxaflex® Awnings & Outdoor Living

Instruction manual  
for use and maintenance

## **Armony Plus** **Folding Arm Awning**



# Armony Plus



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## 1 Introduction

This manual is an integral part of the awning and is intended for its user. It is an essential tool for proper use and maintenance of the product. It is prohibited to remove, rewrite or in any way modify the pages of the manual and their content.

This manual must be kept complete in all its parts in an easily accessible place until disposal of the awning. If the manual is lost or destroyed, the client must request a new copy, providing the main product data and the destination of the new copy.

The manufacturer reserves the right to update products and corresponding manuals without the obligation to update previous products and manuals.

The manufacturer reserves all rights on this manual. It may not be reproduced in any way, wholly or in part, without the manufacturer's written authorization.

Any tampering or modification to the product without the proper authorization of the manufacturer relieves the manufacturer of any liability for damage that may arise.

### 1.1 Symbols used in the manual

The WARNING symbols used in the manual are shown below.



#### **INFORMATION AND PRECAUTIONS**

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**Instructions and useful advice to ensure proper use and conservation of the curtain. Failure to observe these messages may compromise the integrity and/or the resistance of the product.**

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#### **WARNING**

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**DANGER TO OPERATOR! Instructions to be evaluated and followed carefully. Failure to comply with these messages may compromise individual safety.**

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## 2 Safety

### 2.1 General safety information

- **In the event of rain, wind or snow, close the awning completely. Danger of personal injury or property damage.**
- It is prohibited to remove the safety devices installed in the awning (see Chap. 2.2 "Safety devices").
- In the case of a motorized awning, this is opened and closed by pressing a switch and/or through the use of a radio control. Both of these must be kept OUT OF THE REACH OF CHILDREN.
- Make sure that when opening/closing the awning, there are no individuals within its range of action.
- Do not set objects on the canvas of the awning.
- It is prohibited to stand on or hang from the awning. This would create the risk of severe personal injury, as well as damaging the awning.
- If you have any doubts, contact the retailer BEFORE using the awning.
- Users must not carry out operations or interventions on their own initiative on the awning for which they are not competent (see Chapter 3.2 "Foreseen use and environment of use" and Chapter 6 "Maintenance")
- Any tampering or modification without the authorization of the manufacturer relieves the manufacturer of any liability for damage which may arise.
- The user is required to inform the retailer promptly if he discovers any defects and/or malfunctions in the safety devices or if any hazardous situation should occur.
- All cleaning and maintenance must be performed with the electrical power supply disconnected.
- Installation, first start-up, adjustment and special maintenance must only be carried out by specialized technical personnel who are qualified for those duties. Contact technical support.



#### **INFORMATION AND PRECAUTIONS**

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**IF THE AWNING IS UNUSED FOR A LONG TIME, IT IS BETTER TO PROTECT THE ARM SUPPORT WITH A NYLON FOIL.**

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## 2.2 · Safety devices

(OPTIONAL, only in motorized models)

**WIND SENSOR:** in the event of strong wind, the awning closes automatically. The level of activation of the wind sensor is recorded during the start-up process described in the Installer's Manual.

(OPTIONAL, only in motorized models)

**RAIN GAUGE:** in the event of prolonged rainfall, the awning closes automatically. The level of activation of the instrument for measuring the amount of rainfall in a certain period (rain gauge) is recorded during the start-up process described in the Installer's Manual.

(OPTIONAL, only in motorized models)

**EMERGENCY MANOEUVRE:** in the event of an electrical power cut, it is possible to rewind the awning using the emergency winch.

## 2.3 · Residual risks

**DANGER OF CRUSHING OF FINGERS/UPPER LIMBS** between the extensible arms in the closing and opening phase of the awning. It is obligatory to install the product at a **minimum height of 2500 mm**. If this is not possible, in awnings equipped with automations (e.g. wind sensor, rain gauge, etc.) the Manufacturer is required to install a **warning tone**.

## 3 Description of the awning

The **Armony Plus** sun awning with extensible arms can be installed either on a wall or ceiling, with manual or motorized operation. In the latter case, on request it is possible to install the wind sensor, the rain gauge, the twilight sensor and the emergency override. A lighting kit is also available on request (A - Fig. 1).

### 3.1 · Components

The awning is composed of a metallic structure and a canvas.

- **Metallic structure:** this is the load bearing frame which contains the various mechanisms for opening and closing the awning. It comprises a box for full retraction of the unit (B - Fig. 1), a cassette profile (C - Fig. 1), mechanical extensible arms (D - Fig. 1) equipped with sheathed wires or a stainless steel chain and a rewinder tube.
- **Canvas (E - Fig. 1):** to cover and protect the awning.

The building materials ensure good resistance to wear caused by use or by atmospheric agents.

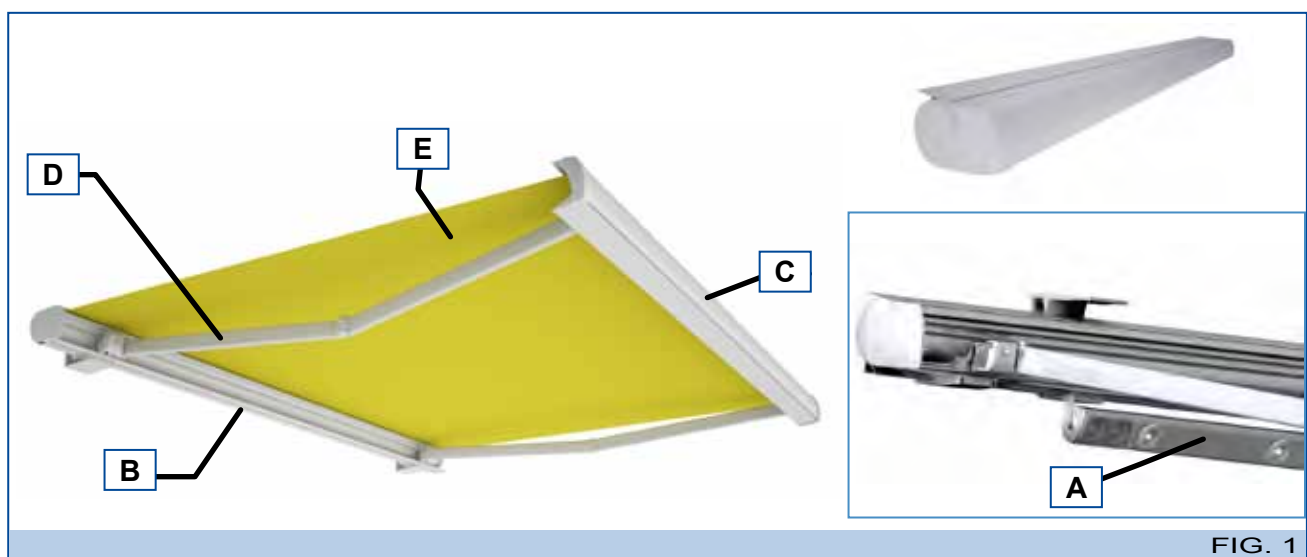


FIG. 1

## 3.2-Intended use and place of use

The function of the awning is to protect against sunlight and to control reverberation in the space under its location. The product, with pre-fixed installation, is intended exclusively for up and down movement of the fabric, for reaching and remaining in positions of maximum opening and closing and possibly intermediate ones. The awning must only be used as described above, even if packaged in waterproof canvases or in PVC. The awning may be used by non-professional operators provided they are **adults**.



### **WARNING**

**Any use other than the aforementioned IS PROHIBITED, since the operating conditions may create hazards for individuals.**

**IT IS PROHIBITED to use the awning as a support base for objects and/or to support people.**

Improper use releases the manufacturer of any damage caused to persons or property. **Failure to comply with the conditions of use automatically voids any type of guarantee provided by the manufacturer .**



### **WARNING**

**IT IS PROHIBITED to install the motorized product in an explosive atmosphere.**



### **WARNING**

**In the event of rain, wind or snow, CLOSE the awning completely. Danger of personal injury or property damage.**



### **INFORMATION AND PRECAUTIONS**

**Operation in icy conditions may damage the awning!**

The product can be placed at any height above the ground over a minimum level of **2500 mm**. If there is an opening/closing switch (only with motorized awning), it must be located in a protected position, at a minimum height of 1500 mm from the ground and in a area that is not hazardous when entered.



### **WARNING**

**Use a locking switch (with key) if the awning is installed in sensitive locations such as schools, boarding schools, hospitals, retirement homes, etc.**

**If the awning is equipped with a radio control, keep it out of the reach of children.**

The radio control can also be used outdoors, provided the system has an IP55 degree of protection. The space available at the time of installation must take into account the range of movement and allow the awning to open at its full extension.



### **WARNING**

**It is prohibited to install or place ladders or any fixed object near the awning which may reduce the space required by the awning.**

## 3.3-Technical data

Maximum overall size. and weight (1 pair of arms)	
Width (cm)	600
Protrusion (with awning open) (cm)	360
Approx. weight (kg)	80 - 90
Rewinder tube Ø (mm)	80

Performance and safety in accordance with UNI EN13561:2004	
Wind resistance class	2 (cm 600 x 360)
Nominal test pressure $p$ (N/m <sup>2</sup> ) $\alpha=1$	70
Water traps resistance class	2

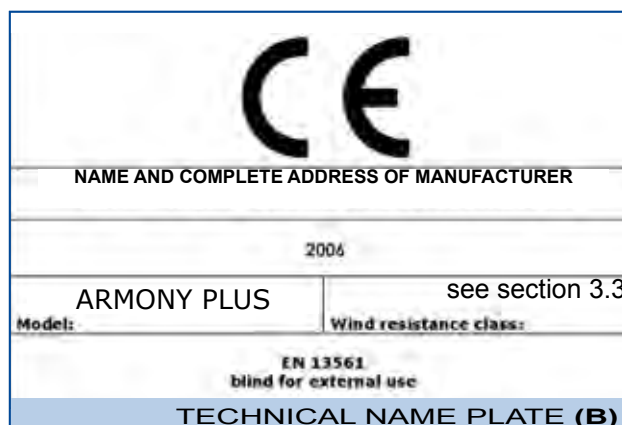
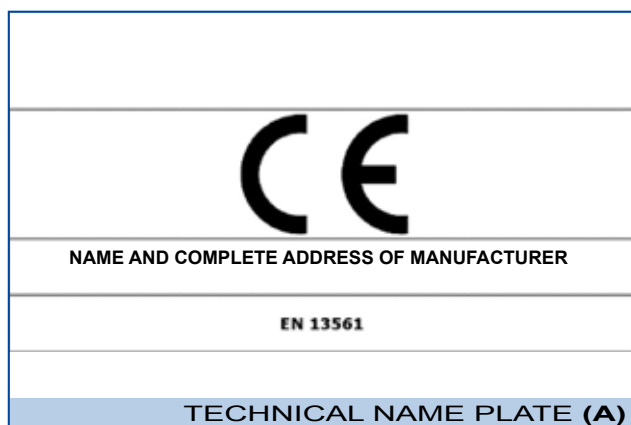
Motor (if present)	
Type	see the manual for the installed motor
Characteristics	EC marked; homologated for awnings

For the characteristics of the optionals, see Chap. 8 “Optionals” and the corresponding instructions.

### 3.4 · Technical name plate

The technical name plate **(A)**, listing the Manufacturer’s reference details, is usually located inside the cassette profile.

The technical name plate **(B)**, which provides the main data and features of the product, is generally supplied with the commercial documentation.



## 4 Transport and installation of the awning

### 4.1 · Transporting the awning

Shipping and handling are the responsibility of the dealer and/or the manufacturer, who shall ship the product using packaging that protects the product properly until it is delivered to the client.

**Damage to the product caused by disassembly of the awning and subsequent shipping and/or handling are not covered by the guarantee.**

The packaging materials must be disposed of and/or recycled in compliance with current standards in the country in which the product is to be used.

### 4.2 · Installing the awning



#### **WARNING**

**The assembly of the components, installation and start up of the product must be performed only by authorized, qualified technicians, and are the responsibility of the dealer and/or of the manufacturer.**

All instructions and the main safety standards to perform these operations are described in the “Assembly Manual” and in the “Installer’s Manual”.

The position selected by the user for installation of the product must ensure sufficient range and the space to open the awning to its full extension (see “Installer’s manual”).

## 5 Use of the awning

### **WARNING**

Before you operate the awning, carefully read Chapter 2 on safety and Chapter 3.2 on the intended use and location of use.

### **WARNING**

Make sure that when opening/closing the awning, there are no persons within its range of action.

### **WARNING**

In case of rain, wind or snow, close the awning completely. Danger of personal injury or property damage.

- Use the awning only as protection from the sun and for the purposes set forth in this manual in Chapter 3.2 on intended use.
- It is severely prohibited to climb or hang/lean objects on the awning.
- Clean mould by cleaning the fabric as set forth in Chap. 6.2 on cleaning the equipment.

### **WARNING**

The awning must always be opened from the top down and never vice versa. Danger of breakage of extensible arms and resulting risk of serious personal injury.

In the event of malfunctions, contact the dealer.

#### MANUAL AWNING

The awning is opened and closed using the manoeuvre rod (A - Fig. 2) and a winch (B - Fig. 2).

### **WARNING**

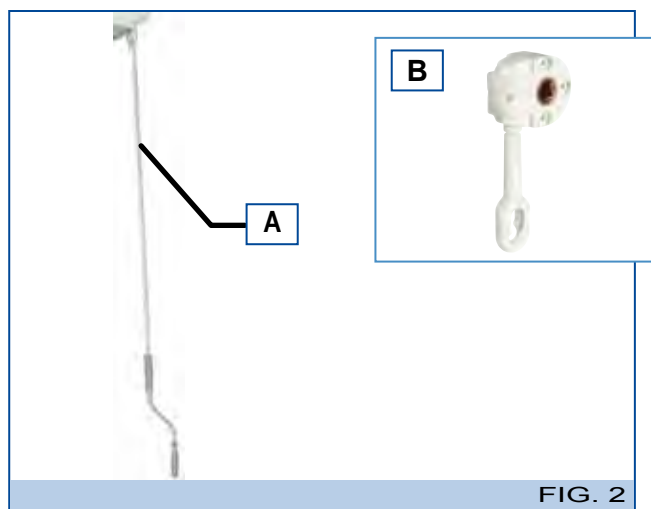
Since the gear does not have end stroke, leave at least one revolution of fabric on roller tube when the awning is fully open.

#### MOTORIZED AWNING

The awning can be opened and closed using:

- a SWITCH, installed near the awning and in a position that gives the user complete visibility of its movements. If located outdoors, the switch must be properly protected;
- a RADIO CONTROL, portable or wall-mounted.

The characteristics and operation of these systems are described in the enclosed manuals for the motor, automations and required controls.



## 6 Maintenance of the awning

### **WARNING**

All cleaning and maintenance must be performed with the electrical power supply disconnected.

Before operating the awning, carefully read Chapter 2 on safety.

Installation, first start-up, adjustment and extraordinary maintenance must only be carried out by specialized technical personnel who are qualified for such duties. Contact technical support.



## 6.1 - Troubleshooting table



### WARNING

**In case of problems or troubleshooting, comply with safety instructions. Especially when troubleshooting or making repairs on the electrical part, there is the danger of electrocution. MAINTENANCE ON ELECTRICAL PARTS MUST ONLY BE PERFORMED BY QUALIFIED PERSONNEL.**

If any problems arise that are not included in the following tables, contact technical support.

#### MANUAL AWNING

PROBLEMS	CAUSES	SOLUTIONS
Conical rewinding of canvas	Incorrect symmetry of arms Uneven fabric thickness	Contact the service centre Roll the canvass all the way back up

#### MOTORIZED AWNING

##### Without electronic control unit

PROBLEMS	CAUSES	SOLUTIONS
Conical rewinding of canvas	Incorrect symmetry of arms Uneven fabric thickness	Contact the service centre Roll the canvass all the way back up
The awning does not roll up all the way.	Incorrect adjustment of limit switch.	Contact the service centre
The awning does not open up all the way.	Motor crown shifts during movement	Contact the service centre
The motor is very noisy	Incorrect wiring Motor failed	Contact the service centre Contact the service centre
The motor shuts down after 4-5 minutes of continuous operation	Thermal protection of motor trips	Let the motor cool off for a few minutes

##### With electronic control unit

PROBLEMS	CAUSES	SOLUTIONS
The awning does not move	Fuse blown Incorrect wiring	Contact the service centre Contact the service centre
The awning moves in jerks (moves for 50 cm, stops, etc.)	Faulty wind gauge	Contact the service centre
The awning does not roll up in high winds.	Fuse blown Faulty wind gauge	Contact the service centre Contact the service centre
The awning does not roll up in heavy rain.	Fuse blown Rain gauge defective	Contact the service centre Contact the service centre
With radio control, the awning opens or closes by itself.	Battery dead	Replace battery in radio remote control (see instructions concerning controls)

## 6.2 · Cleaning the awning

### **WARNING**

**All cleaning and maintenance must be performed with the electrical power supply disconnected.**

The canvas must be cleaned to prevent the formation of mould caused by dust and other materials deposited on the canvas. It can be performed using a vacuum cleaner, or with a damp sponge or cloth and lukewarm water. Leave the canvas to dry after cleaning.

Cleaning with ladders, scaffolding and so forth is to be performed only by specialized personnel. They must comply with safety standards and use personal protective equipment such as safety harnesses with ropes.

### **WARNING**

**Do not use solvents, ammonia, or hydrocarbons.**

### **WARNING**

**We recommend your forethought to cover the arm supports with a pvc shrink-wrap, in case the awning remains closed for a period longer than 30 days; this avoids, that dirt can go into the supports, which can make void the functioning**

## 6.3 · Routine maintenance

### **WARNING**

**All cleaning and maintenance must be performed with the electrical power supply disconnected.**

The operations described hereunder, if performed as scheduled, will keep the product in good condition.

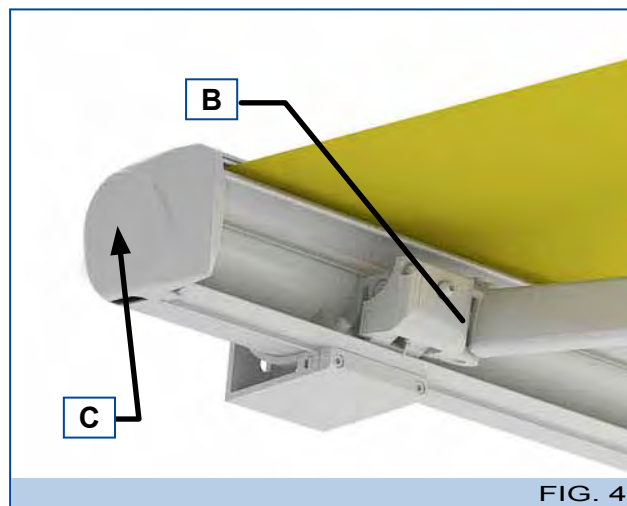
#### **Twice a year, before and after summer use**

The canvas must be inspected for tears or breaks in the stitching. Do this in the spring, prior to summer use, and in the autumn, prior to winter closing.

#### **Yearly, prior to summer use**

Lubricate moving parts with silicon lubricating oil, with the awning about halfway open:

- If the arms are equipped with them, lubricate the chain, the swivel (A - Fig. 3) and the shoulder (B - Fig. 4).
- Lubricate the cap located in the part opposite the control (motor or winch-manoeuvre rod) (C - Fig. 4).



## 6.4 · Special maintenance

It is obligatory to request extraordinary maintenance from technical support every **two years**. If this is not done, the guarantee is automatically voided.



### **WARNING**

**All special maintenance must be carried out by professionally qualified, trained personnel. Request specialized assistance from technical service.**

**See the instructions on assembly, installation and commissioning if it is necessary to disassemble the awning or parts thereof.**

**Use original spare parts; otherwise, the guarantee will no longer be valid.**

Request spare parts from your dealer.

## 7 Disassembly and disposal of the awning



### **WARNING**

**The awning must be disassembled by trained, qualified personnel. Request specialized assistance from technical service.**

The operations are to be performed with the awning completely wound up.

**Cut off the power supply to the system**, disconnect the system downstream of the disconnecting switch, disconnect the motor, tie the arms in place, release the supports and remove the awning from the supports.

The awning is not made of materials that are considered hazardous. There are no special requirements for scrapping it or disposing of it.

Comply with the standards in force at the moment of dismantling the awning when disposing of it.

## 8 Optionals

The Armony awning includes the following options available on request:

- **Wind sensor**: to detect strong winds (only if the awning is motorized);
- **Rain gauge sensor**: to detect heavy rain (only if the awning is motorized);
- **Twilight sensor**: to detect presence of sunlight (only if the awning is motorized);
- **Emergency manoeuvre**: lets you close the awning if there is no electricity (only if the awning is motorized);
- **Armony Plus lighting kit**.

The characteristics and operation of these systems are described in the enclosed manuals for the motor, automations and required controls.

Installation is described in the "Installer's Manual".