



AIRPRO [S]

Installation Manual

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UPDATES		
DATE	UPDATE	DESCRIPTION
29 / 10 / 2018	A	First Edition
02 / 05 / 2019	B	Technical characteristics
13 / 05 / 2019	C	Update Technical Characteristics
17 / 06 / 2019	D	Update Technical Characteristics
02 / 09 / 2019	E	Modbus control
10 / 01 / 2020	F	Update Technical Characteristics
15 / 07 / 2020	G	Update

Technical documents are regularly updated. Anemoi reserves the right to modify the contents of this manual, in full or in part, without warning.

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SAFETY

Before the installation, read the following warning and caution instructions:



WARNING!

Do NOT install, repair or clean the fan while it is in operation or connected to the power supply. Failure to do so may result in serious injury or death.

Do NOT install, handle, repair or clean the fan with wet hands. Failure to do so may result in serious injury or death.

Do NOT use wires with worn or damaged insulation. Doing so may result in serious or fatal electrical shock, fire or other accidents.

Ensure that the wires are held securely and protected from abrasion, chaffing, overload or other damage. Risk of serious or fatal electrical shock, fire or other accidents.

Turn Off power to the fan if you detect any damage. Risk of serious or fatal electrical shock, fire or other accidents.

Do NOT connect a damaged fan to the power supply. Risk of serious or fatal electrical shock, fire or other accidents.

1 INTRODUCCIÓN

The AIRPRO [S] series is the perfect ceiling fan to be installed in up to five meters height ceilings. The innovative motor design with only 5cm height makes this HVLS fan very light and easy to install. This fan is built in seven blades and the drive is integrated in the ceiling mount.

The main characteristics are:

- EC brushless motor without gearbox
- 52mm ultra-thin motor
- Extremely silent fans
- 7 aluminium blades
- Optional customized paint
- Remote control (RF) or Magnocontrol via Modbus



2 TECHNICAL CHARACTERISTICS

	AIRPRO 150 S	AIRPRO 200 S	AIRPRO 250 S	AIRPRO 300 S
GENERAL CHARACTERISTICS				
Diameter	1.5 m	2.0 m	2.5 m	3.0 m
Blades number	7 aluminium blades			
Standard colour	Black matte colour and aluminium blades			
MOTOR CHARACTERISTICS				
Motor power	100W	100W	100W	100W
Supply voltage	110VAC ~ 240VAC I, 50/60 Hz			
Maximum consumption	54W/h	72W/h	84W/h	84W/h
Maximum consumption (A)	0.47 A	0.6 A	0.71 A	0.71 A
Maximum speed	180rpm	130rpm	95rpm	70rpm
Protection degree	IP20	IP20	IP20	IP20
Sound level	<35dBA	<35dBA	<35dBA	<35dBA
Total weight	14kg	16kg	18kg	20kg
Operation temperature	-10°C ~ 40°C without derating			
Motor type	Brushless EC motor with neodymium magnets			
FAN PERFORMANCE				
Airflow*	29,711 m ³ /h	35,653 m ³ /h	41,595 m ³ /h	47,538 m ³ /h
Recommended coverage**	99 m ²	119 m ²	139 m ²	158 m ²
Maximum coverage***	139 m ²	166 m ²	194 m ²	222 m ²
CONTROL				
Controllers	Remote controller or Magnocontrol			
OPTIONS				
Extensions	Optional rod extensions of 800 & 1300 mm			
Colour	Optional paint or hydroprinting			
Controller	Magnocontrol 10-25			
REGULATION				
Certifications	IECEE CB / BSMI			

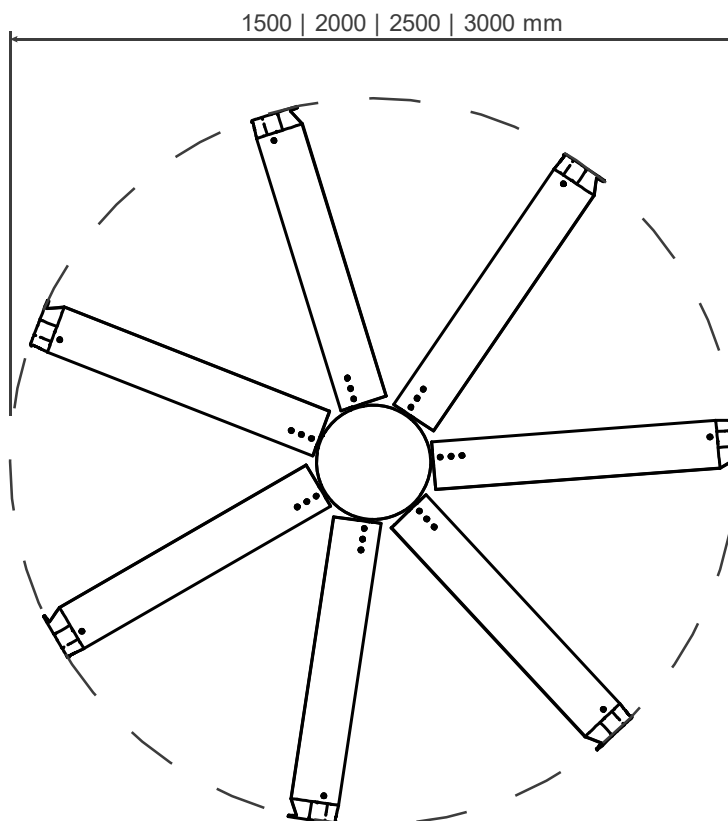
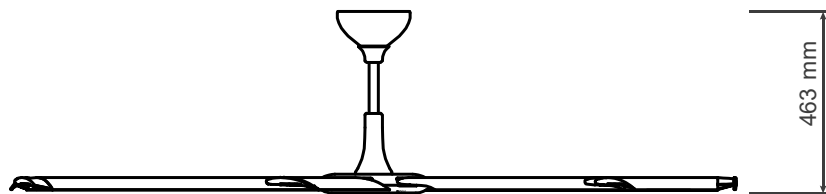
* Following AMCA 230-99

** Air Speed > 0.5 m/s

*** Air Speed > 0.2 m/s

3 DIMENSIONS

The Anemoi AIRPRO [S] comes in four different diameters. The height of the fan can also be adjusted by modifying the length of the extension bar. The following figure shows the dimensions of the fan with a standard extension:



4 DELIVERY

The Anemoi AIRPRO [S] fan is delivered in two wood boxes, one including the motor parts and the other the blades. Handle the fan boxes carefully and with proper lifting equipment to avoid any damage.



CAUTION!

Use proper lifting equipment to handle the motor and blade boxes. Otherwise, the fan could be damaged and there is risk of accident.

4.1 Package Dimensions & Weights

The dimensions and weights of these boxes are listed in the following table:

Model	Box	Width (mm)	Depth (mm)	Height (mm)	Weight (kg)
AIRPRO [S]	Motor	620	620	230	11
	Blades	1430	420	220	14,5

4.2 Packing List

The following tables include the different pieces sent inside the boxes. Please check the status and quantity of the fan equipment and the supporting parts immediately after you have opened the box to make sure that the goods received are in accordance with your order. If parts are missing or damaged, please inform our company's responsible person immediately for revision.

Blades Box:

No.	Component name	Qty
1	Fan Blade	5 pcs

Motor Box:

No.	Component name	Qty
1	Mounting Bracket	1 pc
2	Fan Rod	1 pc
3	Fan Motor	1 pc
4	Control Box	1 pc
5	Mounting cover	1 pc
6	Remote Control	1 pc
7	M6*35 Screws	1 pc
	M6 Washer	1 pc
	M6 Locker nut	1 pc
8	M3*8 Screws	2 pcs
9	M6*30 Screws	21 pcs
	M6 Washer	21 pcs
	M6 Locker nut	21 uds

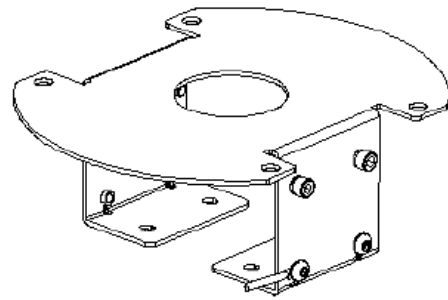
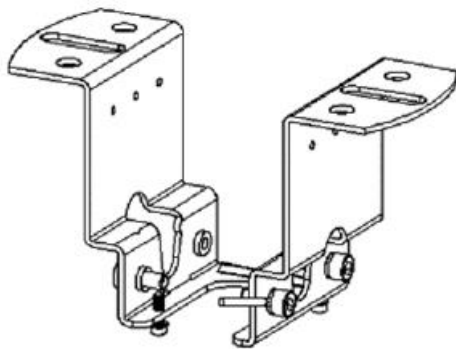
5 MECHANICAL INSTALLATION

The Anemoi AIRPRO [S] fan has been designed for ceiling installation. Ensure that the ceiling area chosen can hold the weight of the fan and that there are no obstacles in its operating range. Make sure that the fan is installed at a height greater than 2.6m.

The fan is available in two versions, Type S or Type F, check the ceiling mounting and make sure which type is yours. Follow the corresponding instructions.

Ceiling mounting S Type

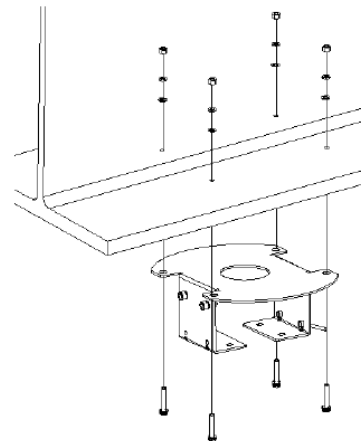
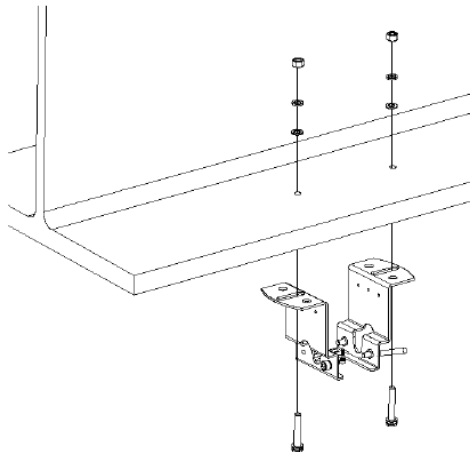
Ceiling mounting F Type



5.1 Ceiling Mounting

S Type

F Type

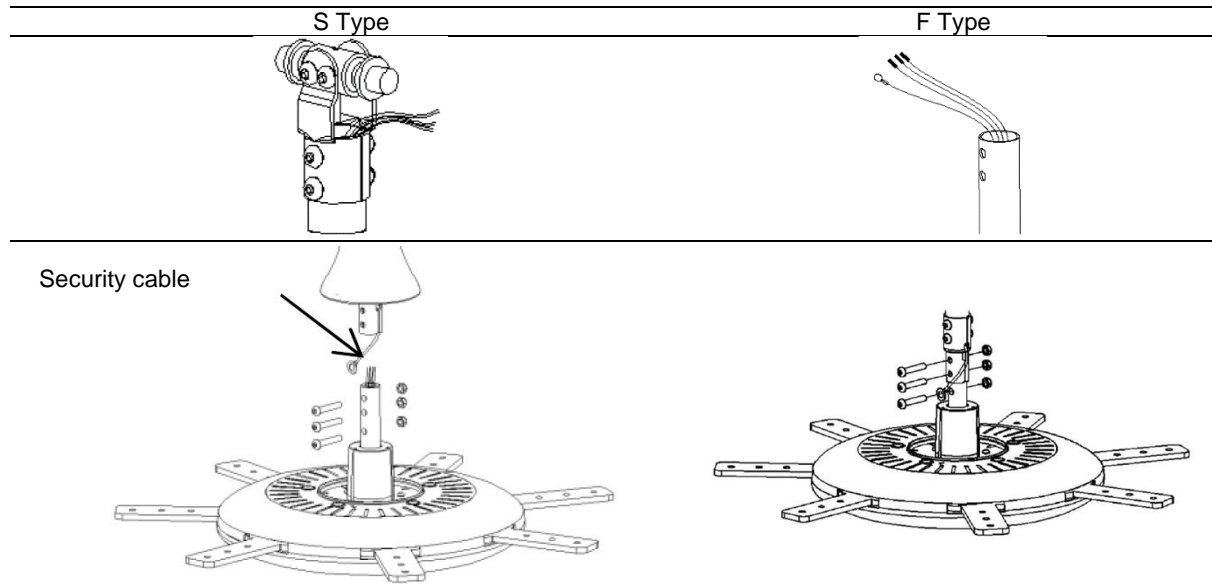


Use M6 screws provided to fix the anchor to the ceiling and to support the weight of the fan (19kg max).

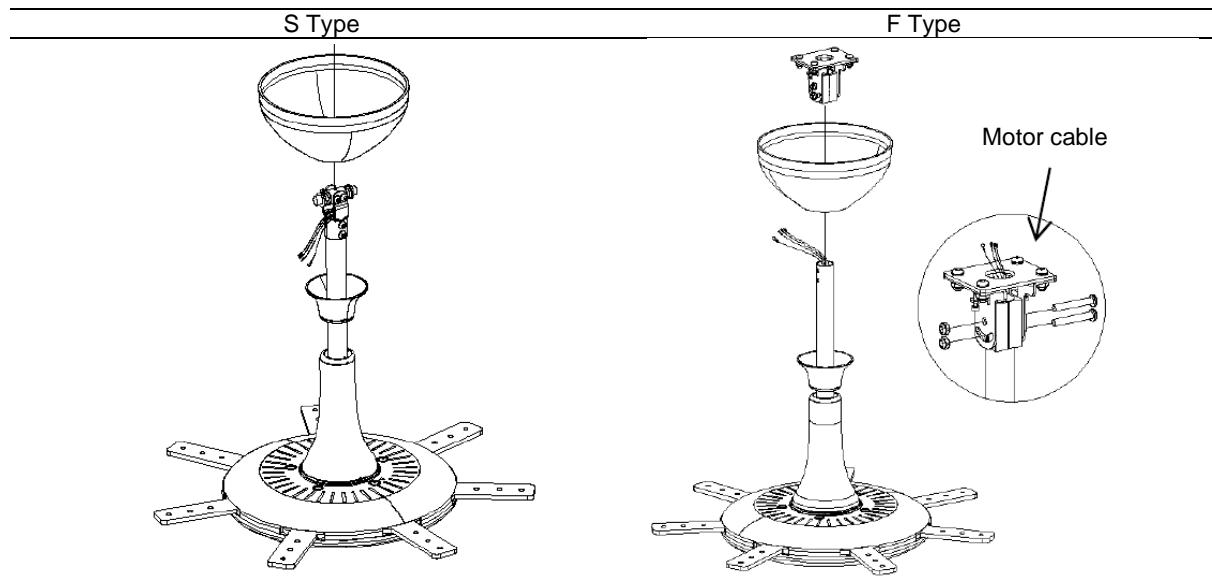
5.2 Securing the Down Rod to the Engine

Take the extension and motor out of the box. Loosen the screws and caps on the extension tube and pass the safety cable and electrical cables through the tube.

Attach the extension to the motor using the extension screws. The safety cable must be fixed to the motor screw as shown in the figure. Recommended tightening torque: 5 N.m (50 kgf.cm)



Insert the cover into the extension. Make sure that the cables pass correctly through the extension and that the screws are properly tightened. Recommended tightening torque: 5 N.m (50 kgf.cm).



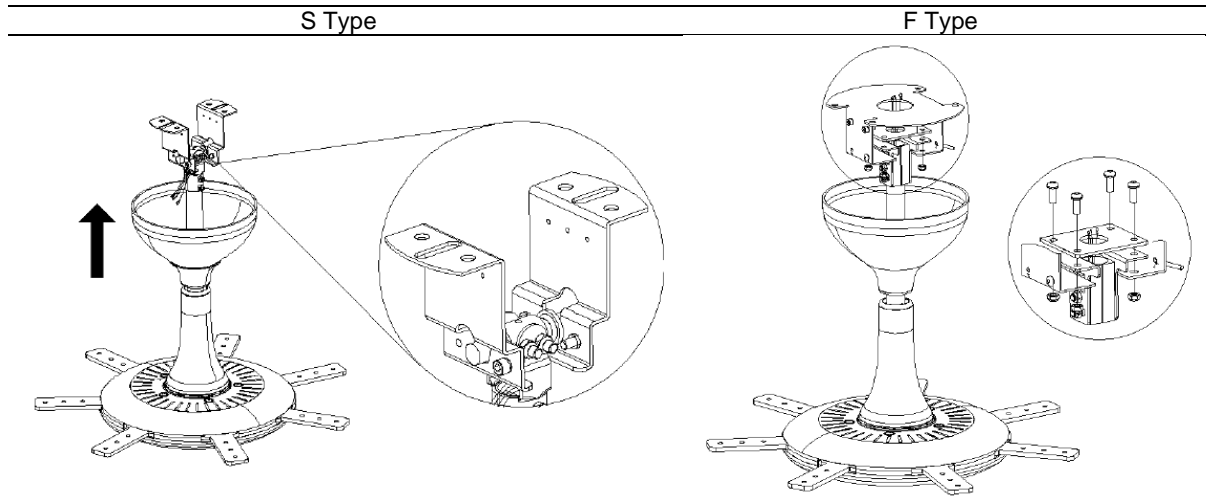
CAUTION!

Ensure that the motor cables exit correctly from the top. Otherwise, the fan may be damaged.

5.3 Securing the Fan to the Ceiling

To attach the fan to the ceiling, simply place the extension ball joint in the center of the anchor previously attached to the ceiling, as shown in the images below.

NOTE: Be careful not to pinch the cables during operation.

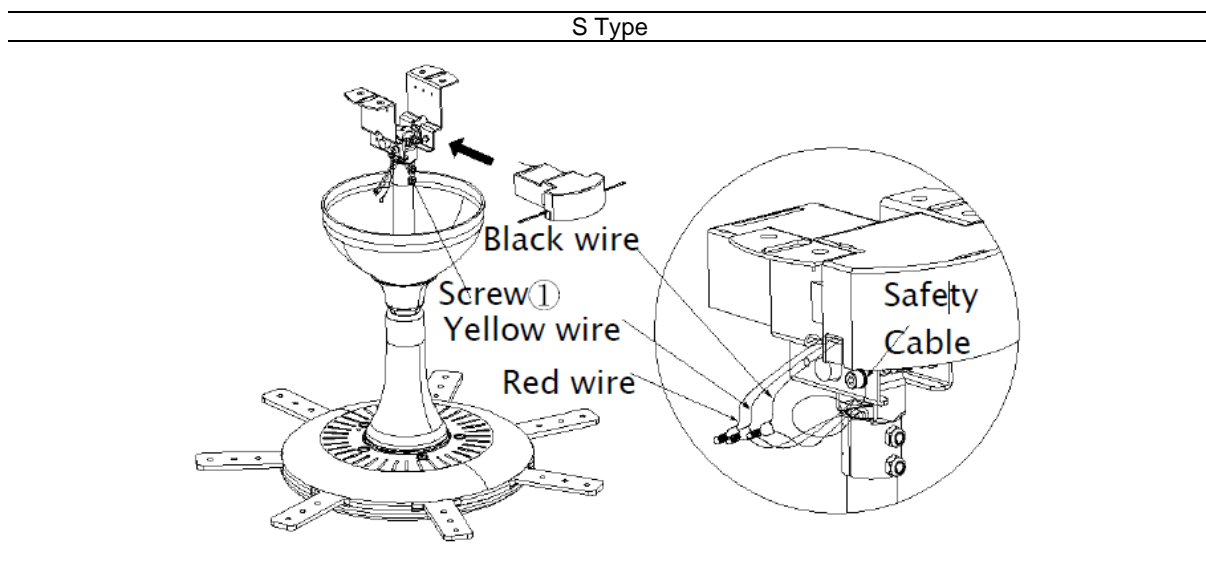


CAUTION!

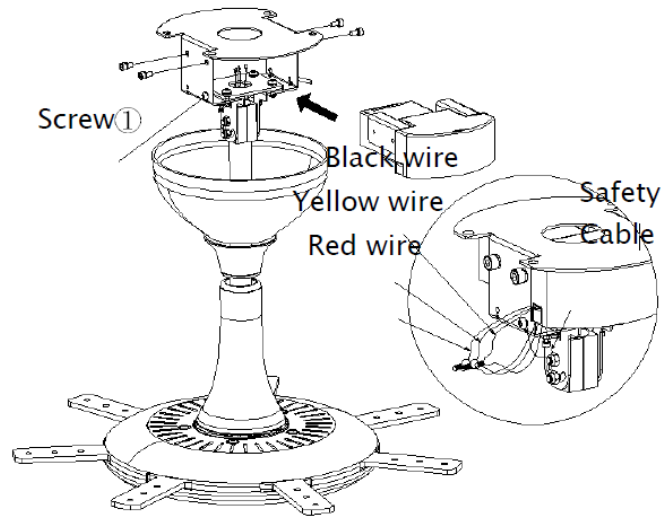
Be careful not to press the wires during operation. Otherwise, the fan may be damaged.

5.4 Receiver

Insert the receiver into the fitting, in the F Type model the bracket screws must first be loosened.



Tipo F

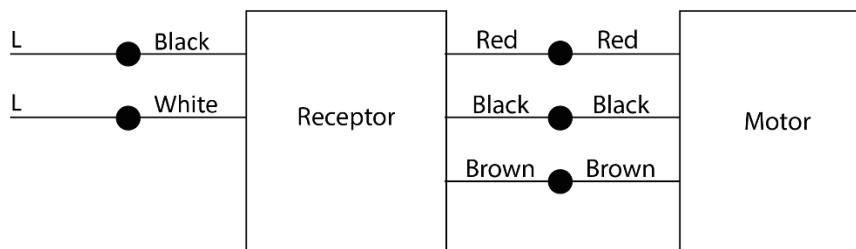


CAUTION!

Ensure all cables are protected inside the top bezel. Otherwise, the fan may be damaged.

5.5 Electrical Connections to Receiving Unit

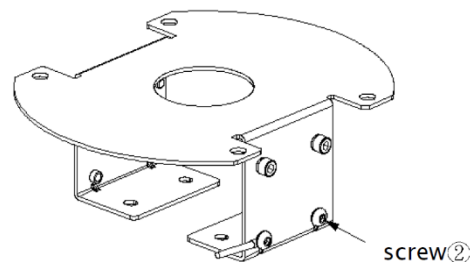
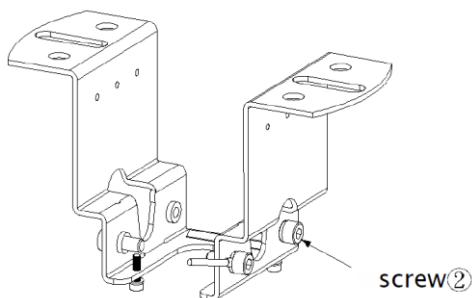
The receiving unit of the remote control should be wired as explained below:



Connect the ground wire to the Screw 2 of the hardware as shown in the figure:

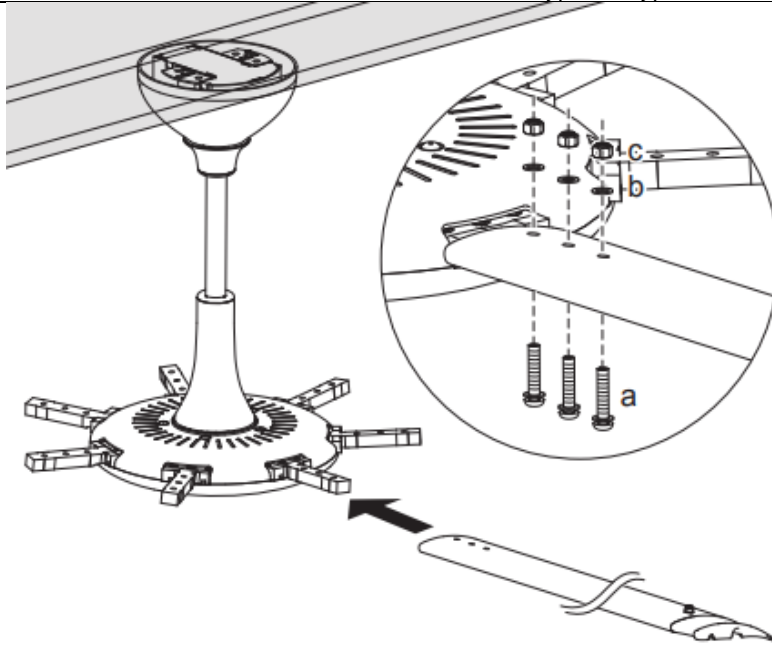
S Type

F Type



5.6 Mounting the Blades

S Type / F Type



7. The engine has seven projections that allow to fix the seven blades to it. Each blade is inserted in the projection by the part that has three holes and is fixed to the motor with:

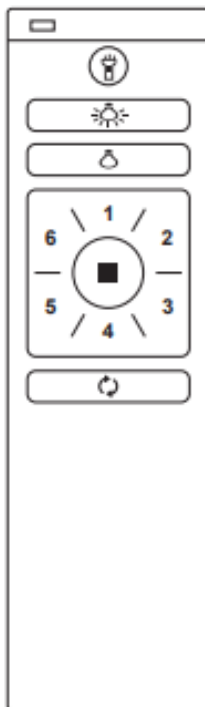
- a) Three M6x30mm screws
- b) Three M6 nuts
- c) Three M6 washers

6 CONTROL

The Anemoi AIRPRO [S] fan can be purchased with remote control or with Modbus control. Next, the particularities of each of the two models are established.



6.1 Remote control

6.1.1 Remote control S Type





The Anemoi AIRPRO [S] fan is operated through a remote control. You must pair the remote control to the fan before using it.

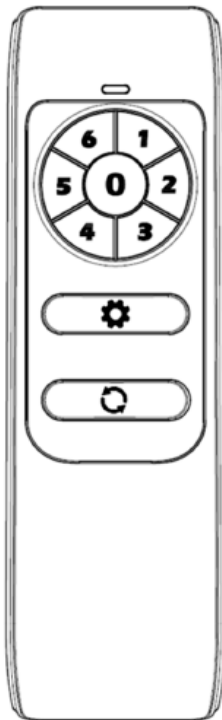
You need to set up the receiver for the fan to work properly. Please, follow the following steps:

- 1 - Open the back cover of the control and place two AAA batteries in the knob.
- 2 - Switch on the fan supply and before 30 seconds have elapsed, press the buttons simultaneously  + .
- 3 - A beep sounds when the devices are paired correctly.

The remote control has the following switches and buttons:

1 ~ 6	Allows you to adjust fan speeds
	Stops the fan
	Allows operation in reverse mode (optional). To be effective, the fan must have a set speed.

6.1.2 Remote control S Type



The Anemoi AIRPRO [S] fan is operated through a remote control. You must pair the remote control to the fan before using it.

You need to set up the receiver for the fan to work properly. Please, follow the following steps:

- 1 - Open the back cover of the control and place two AAA batteries in the knob.
- 2 - Switch on the fan supply and before 30 seconds have elapsed, press the buttons simultaneously **0 + ⚙**.
- 3 - A beep sounds when the devices are paired correctly.

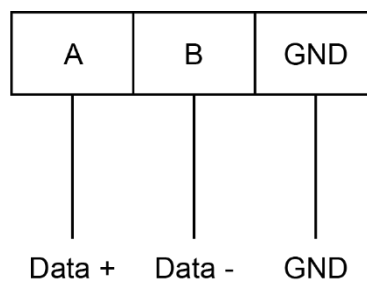
The remote control has the following switches and buttons:

1 ~ 6	Allows you to adjust fan speeds
0	Stops the fan
↻	Allows operation in reverse mode (optional). To be effective, the fan must have a set speed.

6.2 Modbus control

The Anemoi AIRPRO [S] fan needs an external control to work. The external control is connected directly to the fan control board using shielded cable type modbus cable RS485 2x2x0.50 mm² POSCY.

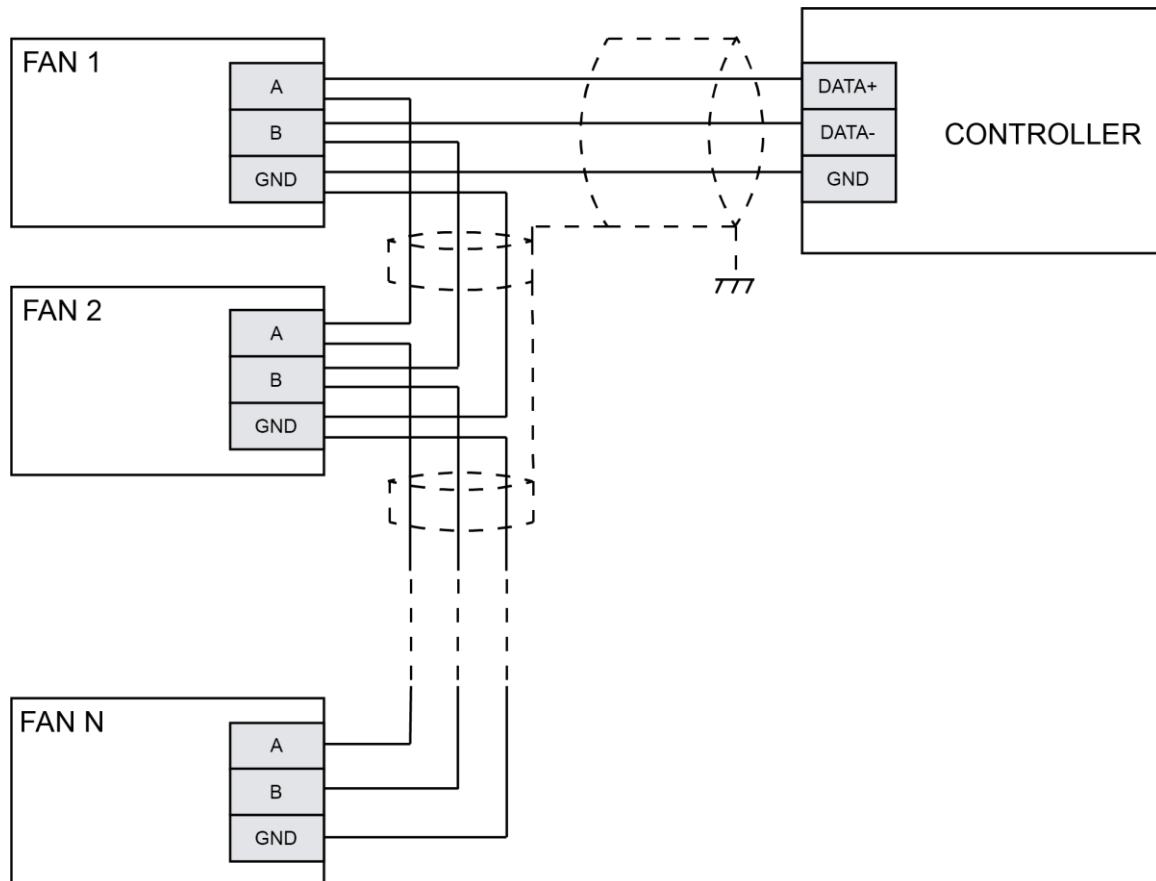
The following figure shows the detail of the control connectors:



6.2.1 Multiple Fan Installation

In installations with multiple fans, it is possible to control the fans using a single controller. In this case, the controller is connected to the different by using control connections A, B and GND.

The following figure shows the detail of the control connectors:



WARNING!

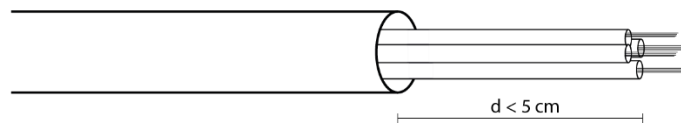
The earth meshes of each cable section must remain together. Failure to do so may lead to communication errors.

Connect only one end of the earthing to the ground. Failure to do so may lead to communication errors.

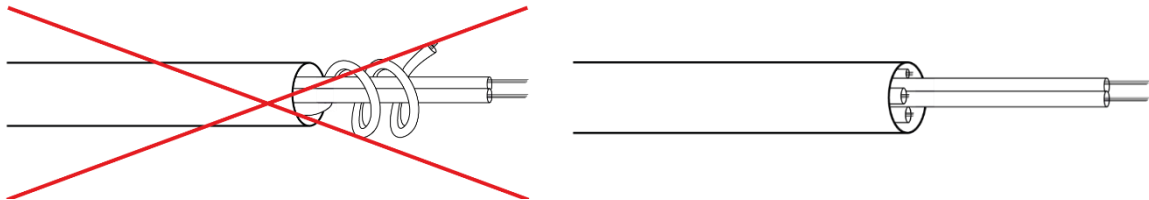
6.3 Wiring installation recommendations

To ensure correct installation and functioning of the Modbus control fan, please keep in mind following recommendations:

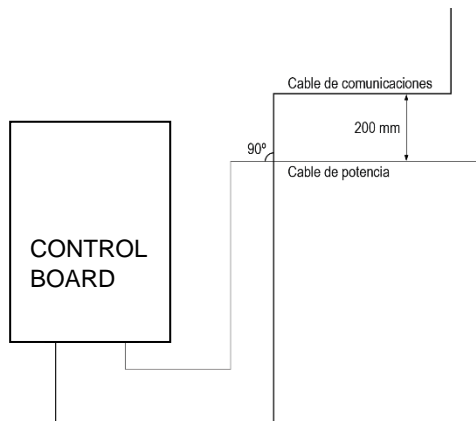
1- Please strip the wire 5cm as a maximum as shown below:



2- Communication cables cannot be wound. If it were done, they could act as an antenna. Communication cables that are not used have to be cut and left inside the shielded tube as shown below.



3- Please keep always a distance of at least 20cm between the power and the data cable. If both cables must cross at some point, please ensure that they do so at a 90° angle to prevent interference.



WARNING!

Do not strip the communication cable more than 5cm. Failure to do so may lead interferences.

Do not wind the unused communications cable. Failure to do so may lead interferences.

Maintain a minimum distance between electrical and communications wiring. Failure to do so may lead interferences.

Avoid power zones. Failure to do so may lead interferences.

7 MAINTENANCE

Please maintain the fan as follows:

Every three months:

- Clean up the dust of the fan with a dry cloth.
- Verify that the fan is working properly.
- Ensure that the fan does not make any noises or vibrations.
- Verify that the fan is working in the correct direction.

Yearly:

- Ensure that the anchoring screws and the Blade screws are properly tightened.

Remarks:

Please take the battery off if you are not going to use the fan for a long time.

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