

## Installation and operating instructions



03.222

**This product is made for inner room air circulation in conformity to the current CE rules:**

EN 55014-1: 2017  
EN 61000-3-2: 2014  
EN 61000-3-3: 2013  
EN 55014-2: 2015  
EN 60335-2-80: 2003 + A1: 2004 + A2: 2009  
EN 60335-1:2012 + A11: 2014 + A13: 2017  
EN 62233: 2008  
EC No. 206/2012 - 2009/125/EC  
EN 50564: 2011  
IEC 60897: 1986  
EN 60704-2-7: 1998



### **IMPORTANT:**

**Do not use this fan for other applications without our agreement. Read and follow these instructions carefully to prevent personal injury and property damage. Keep always this instruction booklet**



# Industrial ceiling fan 03.222 - 03.225

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## Installation safety - must be followed

1. The electric installation and the repairs must be done by a professional expert in accordance with all applicable codes and standards.
2. Verify that the power supply is compatible with rating label markings.
3. The fan must be protected by a certificated switch, with double terminal and contact opening not lower than 3 mm. Means for disconnection must be incorporated in the fixed wiring in accordance with the wiring rules.
4. Choise of placement:
  - The ceiling structure must be able to support at least 50kg/m<sup>2</sup> moving weight.
  - **WARNING:** Choose a place where there is no risk for people, animals or objects to contact with the fan and the rotating blades.
  - To prevent contact with running blades, the fan must be mounted with a minimum distance of 2,50 m between blades and floor.
  - The fan should not be installed in a damp room.
  - The fan should not be installed near flammable or explosive substances or gas.
  - Follow the requirements of automatic fire alarm systems.
  - Follow the requirements of infrared heaters regarding the gas exhaust system.
  - Strictly follow the local insurance association for accident prevention.
5. For the installation of the ceiling j-hook use only fasteners approved for this kind of ceiling (cement, wood, steel,...). The choise of the fastening parts and the correct installation of the j-hook is on the responsibility of the installation expert.
6. **WARNING:** Before hanging the fan and connecting the wiring make sure power is off at the main service panel. Tag it to prevent unexpected power on.
7. The wiring must be in accordance to the official norms. The fan must be connected to "earth": Make sure that the green/yellow wire of the fan is tight connected with the green/yellow wire of the power supply.
8. Pay attention to the wires and the blades during the installation, in order to prevent any damage.
9. While installation check all nuts, bolts and cotter pins. Be sure all is perfect tight.



## Operational safety - must be followed

1. This appliance can be used by persons aged from 18 years and above only. Children shall not use the appliance. Persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge must have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
2. Do not work near a running fan. Turn power off before.
3. Do not bend the blades and do not push any object between the running blades. Never stop the blades with hands.
4. Only one direction of rotating is allowed: Air movement downwards.
5. **WARNING:** If there is any change in the condition of the fan, such as noises, wobbling, damaged or loose parts, the fan must be switched off immediately and repaired by a professional.
6. In case of taking out of operation of the product, you have to make it unusable. For example by removing the wiring in the junction box.

## Dust and splash water protection

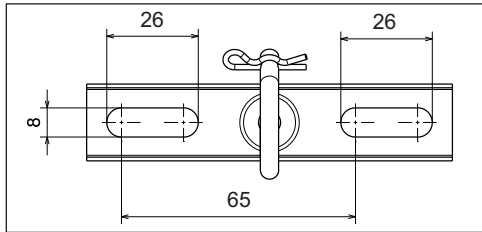
1. This fan is delivered with the protection IP54:  
IPx4 = Splash water protection (according to the required protection class IP)  
IP5x = Dust protection (according to the required protection class IP)  
Please consider, that the fan could be damaged by any damages beyond this charges. If there is unauthorized interference with the device or a false mounting, the protection IP54 cannot be guaranteed.  
Note in particular:
  2. Be sure to install the rubber seal between the blade and the motor.
  3. Please follow the following instruction in case of detaching the canopy of the motor:  
To detach the canopy you only have to slightly loosen the three screws, do not remove them.  
Reattach the canopy:
    - Slide the canopy with the seal hose at the bar completely downwards.
    - Lift the canopy max. 2mm up of the lowest position and fix it horizontally with the three screws (do not overtighten).
    - Afterwards check if the canopy does not touch the motor by turning the motor by hand. If needed, correct the proper seating of the canopy.

## Contents of the package

- 1 motor, assembled with downrod and rubber grommet
- 3 blades
- 1 ceiling j-hook with safety pin

## Mount of the ceiling j-hook

- Mount the ceiling j-hook with fastening parts authorized for this kind of ceiling safety to the ceiling. Make sure the screws are tightened well.
- The j-hook must be immovable, able to support at least 40 kg moving weight and must not gradually loose because of the fan use.



## Mount of the blades

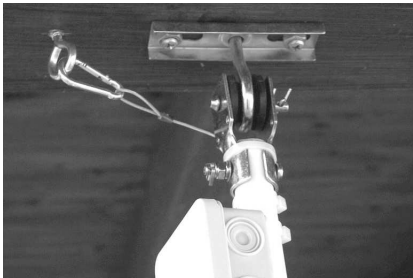
- Use a soft underlay to place the motor for assembling with blades.
- The blades are assorted by weight to prevent wobbling. Do not exchange blades from one set to another.
- Mount the three fan blades (blade holder upside) to the motor using the blade screws, spring rings, washers and blade holder underlay cards, same as the drawing.
- Make sure the blade screws are evenly and safely tightened (with care not to damage the thread).

## Hang the fan and connect wiring

- **WARNING:** Before doing anything with the power supply, make sure power is off at the main service panel. Tag it to prevent unexpected power on.
- Carefully hang the fan assembly by place the rubber grommet in the ceiling j-hook. Make sure not to wedge wires between rubber grommet and ceiling j-hook.
- **WARNING: Place the safety pin in the hole at the end of the ceiling j-hook.** The fan must not used without the original j-hook safety pin. If the pin is lost, order a new one.
- Fix the power cord (on site) professionally and waterproofed into the junction box of the fan. Observe the correct connections:
  - the green/yellow wire with the “grounding”  $\perp$
  - the blue wire with the “neutral”
  - the brown wire with the “line”
- Fix the power cord at the ceiling professionally.
- Afterwards, make sure that the power cord is long enough for a little movement of the fan (do not strain).
- **IMPORTANT:** Make sure the wire connection is safe and tight. Make sure the wire connection is according to the local electrical code. If any wire will be damaged, this must be fixed by a professional expert, to prevent danger.
- **NOTE:** For wiring of a fan control, follow instructions packed with the speed controller.

## Mount of the safety wire

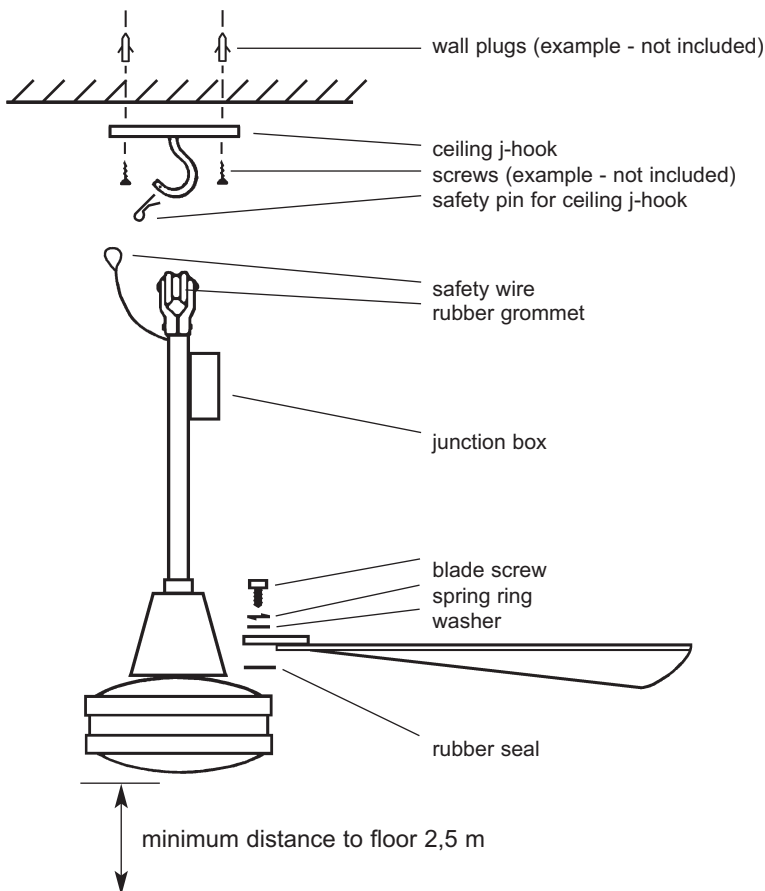
- Choose a screw or a screw eye, suitable for the safety wire and the kind of ceiling.
- Fix the safety wire with the screw or the screw eye to the ceiling, 10cm beside the upper canopy.



- After this the safety wire must not touch the ceiling j-hook and the rubber grommet should not be stretched.

- The screw or the screw eye must be immovable, able to support at least 40 kg moving weight and hold the safety wire safe.

Picture: example - screw eye and carabiner not included



## **Troubleshooting**

All checks and repairs shall be performed by the manufacturer, its service agent or suitably qualified persons with original manufacturer parts.

**WARNING:** Before checking the fan, make sure power is off at the main service panel. Tag it to prevent unexpected power on.

The motor housing must not be opened.

### **Fan will not start.**

#### **Suggested remedy**

- Check main and branch circuit fuses or circuit breakers.
- Check line wire connections to fan and switch wire connections in switch housing.

### **Fan makes noise.**

- **IMPORTANT:** For the reason of safety the fan must not be used with unusually noises!

#### **Suggested remedy**

- Allow a “running-in” period of 24 hours. Most noises, associated with a new fan, will disappear after this period.
- Check the screws which attach the fan blade to the motor to make sure that they are tight.  
Check all nuts and bolts behind the canopy of the motor for perfect tight.
- Check the canopy should not be allowed to touch the motor.
- In conjunction with an electronic speed controller, a slight humming (hertz hum) can occur, especially at low speeds. Do not use oversized electronic speed controllers.

### **Fan wobbles / fan is out of balance.**

- **WARNING:** If unusual oscillating movement is observed, immediately stop using the ceiling fan and contact the manufacturer, its service agent or suitably qualified persons.

#### **Suggested remedy**

- A little wobbling, especially after starting or after speed changes, is normal. If end speed is reached, the fan will be stable.
- Main causes for wobbling are unequal blades. If one blade is damaged or bended use a complete new set of three blades.
- The blades are assorted by weight to prevent wobbling. If you have to assemble a range of fans, be sure not to exchange a blade from any set of three blades.
- Check to make sure the blade screws which attach the fan blade to the motor are tight.
- Check all nuts and bolts behind the canopy of the motor for perfect tight.

### **Fan runs too slow.**

#### **Suggested remedy**

- The capacitor could be damaged, maybe because of overload or lightning. Arrange to check the capacitor by a professional expert and order a new original capacitor.

## Maintenance

1. **ATTENTION:** The necessary maintenances are indispensable and must be done by an expert.
2. **WARNING:** Before maintenance and cleaning the fan, make sure power is off at the main service panel. Tag it to prevent unexpected power on.
3. On the basis of the typical fan use, gradually some connections may be loose. Therefore all connections must be checked two times per year for perfect tight. Especially the blade screws, all nuts, bolts and cotter pins inside the canopy, the pin and strength of the ceiling j-hook and the safety wire. In case of intensive use the checks should be more frequent.
4. Check the blades are free from damage and the fan does not wobble.
5. In case of need use a damp cloth for cleaning. Do not use liquid cleaners or aerosol cleaners. Never dip the fan into water or other liquid.

## Disposal and environmental protection

1. This product and the packaging are made of valueable raw materials and should not be disposed in the household waste.
2. By ensuring this product is disposed of correctly, you will help prevent potentially negative consequences for the environment and human health
3. Sort the different kinds of waste of the packaging and the machine and follow the newest disposal technology.
4. Take care to use authorised disposal and recycling specialists.

## Specifications

Model	03.222	03.223	03.224	03.225
Color	white	white	white	white
Voltage	230 V, 50 Hz			
Power	75 W			
Max. current	0,35 A			
Speed	300 rpm			
Air Volume	15.000 m <sup>3</sup> /h		15.000 m <sup>3</sup> /h	
Performance max.	10 m	6 m	10 m	6 m
Sound level at 1m	52 dB(A)			
Weight	9,5 kg			
Diameter	1420 mm			
Height	690 mm	690 mm	440 mm	440 mm
Blade	straight	curved	straight	curved
Carton size	690x255x235 mm			
Test mark	CE IP54			

Subject to alteration.



Made in PRC

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