

Fan The Future Lead The Way

CONINCO Fans is a leading supplier of high-efficiency, large-scale fans, specializing in providing high-quality HVLS (High Volume Low Speed) fan solutions for various industrial and commercial environments.

Our products are designed to improve air quality and temperature control in workspaces through energy-saving, eco-friendly, and comfortable air circulation. They are widely used in large spaces such as warehouses, production workshops, shopping malls, restaurants, stations, sports venues, and logistics centers.

CONINCO HVLS fans feature advanced technological designs, combined with intelligent control systems and efficient power transmission systems, enabling high airflow with low power consumption. This ensures comprehensive air circulation, significantly enhancing temperature uniformity within spaces while greatly reducing energy consumption.

We are committed to offering customized solutions to meet the unique needs of different clients and have established a strong global service network to ensure the sustained and stable operation of our products, delivering long-term energy-saving benefits.

As an industry leader, CONINCO Fans not only values product quality and innovation but also places a strong emphasis on after-sales service and technical support, striving to provide each client with a professional and reliable service experience.

Our mission is to help customers achieve **"Powering Comfort, Elevating Performance"** while enhancing the overall experience of their spaces through innovative technology and efficient products.

Whether for new construction projects or renovation works, CONINCO will be your best choice.

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ProAir Series Fans

Operating Instructions

2026.08

CONINCO

Installation Checklist



Please complete the following checklist before powering on the fan. Do not operate the fan if any item is incomplete. Contact an authorized CONINCO technician for assistance if needed.

A. Pre-Installation

- ☐ Check packaging for any signs of damage during transportation
- ☐ Verify all parts and components match the packing list
- ☐ Confirm the installation structure meets load-bearing requirements
- ☐ Ensure personnel are qualified and equipped with proper PPE

B. Mounting & Structure

- ☐ Mounting bracket is securely installed using proper bolts and fasteners
- ☐ All connections are tightened with a torque wrench as per specifications
- ☐ Downrod is installed vertically, fan aligned with center axis
- ☐ Installation height meets clearance requirements (at least 2.5m from floor)
- ☐ Anti-vibration washers and lock nuts are in place to prevent loosening

C. Electrical

- ☐ Cables used are compliant and protected with insulation sleeves
- ☐ Power connections are correct and grounding is secure
- ☐ Communication cables between control box and fan are properly connected
- ☐ Use multimeter to check voltage and resistance before powering on
- ☐ All electrical work complies with local electrical codes (e.g. NEC/IEC)

D. Blades & Hub

- ☐ Blades are installed in correct order and orientation
- ☐ Blade-to-hub bolts are tightened and torque is recorded
- ☐ Blade spacing is even, no risk of interference
- ☐ Anti-loosening devices and safety wires are installed properly

E. Final Inspection

- ☐ All fasteners are double-checked and secure
- ☐ Adequate clearance from all surroundings (side and top)
- ☐ Initial power-on test of control system is successful
- ☐ Fan rotates in correct direction (clockwise or counterclockwise)
- ☐ Fan runs smoothly with no abnormal noise or vibration

F. Handover

- ☐ Demonstrate controller functions including start/stop/speed control
- ☐ Provide user manual and warranty card to customer
- ☐ Complete installation log and obtain customer signature

✓ Note: This checklist must be signed by the installation supervisor and documented with photos before operation.

Correct Use and Application



This Operation Manual applies to CONINCO HVLS Industrial Fans (hereinafter referred to as "the product"). The product is specifically designed to provide ventilation and cooling in large spaces such as industrial facilities, warehouses, logistics centers, manufacturing plants, and commercial venues. Please read this manual carefully before installing, operating, or maintaining the product, and keep it for future reference.

Proper Use

This product is intended solely for the purpose of improving air circulation and temperature regulation as described in this manual. Any use beyond the scope of this manual, including operation in flammable, explosive, highly corrosive, or extremely dusty environments, shall be deemed improper and may result in personal injury, equipment damage, or property loss.

Definition of User Responsibility

In this manual, the "user" refers to the individual or legal entity that operates the product, including its employees or designated representatives. In special cases such as leasing or subcontracting, the user is defined as the party responsible for operation and maintenance of the fan under contractual agreement.

The User Must Ensure:

- The fan is used solely for its intended purpose;
- No overloading or improper usage occurs;
- No structural or functional modifications are made without authorization;
- All applicable national and local electrical and construction codes are strictly followed;
- Installation, operation, and maintenance are carried out according to this manual and the Installation Guide;
- All operators have read, understood, and received adequate training on this manual.

Failure to comply with this manual will void the product warranty.

CONINCO reserves the right to deny warranty claims if the product is improperly installed, wired, operated, or serviced by the user or any third party without prior authorization from CONINCO.

Additional Equipment and Modifications

Any installation of accessories or functional upgrades that may affect the fan's performance must be approved in writing by CONINCO. In some regions, local authority approval may also be required. However, such approval does not constitute authorization from CONINCO.

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Preface

Thank you for choosing CONINCO HVLS Fans. This manual is designed to help you understand the safe and effective use of your fan system. It contains essential information regarding installation, operation, maintenance, and safety guidelines to ensure optimal performance and longevity of your fan.

CONINCO is committed to providing high-quality, innovative ventilation solutions for industrial and commercial spaces. Our HVLS (High Volume, Low Speed) fans are engineered for superior efficiency, energy savings, and environmental comfort. Please read this manual thoroughly before installing or operating the fan. Proper understanding and adherence to the instructions will help you maximize the performance and safety of the product.

Should you have any questions or need assistance, please visit our website at www.conincofans.com or contact our customer service team.

We appreciate your trust in CONINCO and wish you a comfortable and productive environment with our fan systems.

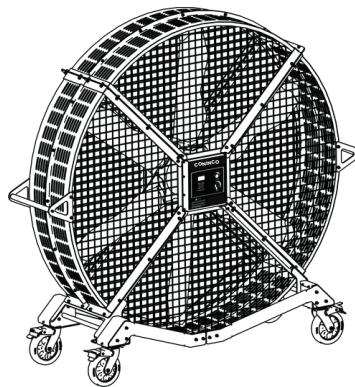
Product Description

CONINCO ProAir Portable Fans are industrial fans designed for large-scale air circulation. With their high efficiency and excellent airflow control, they have been widely used across various industries, meeting the demands of air movement, comfort, and safety in commercial and industrial environments. Their versatility makes them an ideal choice for factories, warehouses, sports venues, and commercial retail spaces. By choosing ProAir Portable Fans products, customers gain a sustainable, cost-effective, and high-performance solution for airflow and comfort needs.

Application Scenarios:

- Large Industrial Facilities: Factories, workshops, logistics warehouses, and manufacturing production lines, helping to quickly expel heat and humidity, improving the work environment.
- Commercial Spaces: Large shopping malls, supermarkets, and warehouse-style retail stores, providing even airflow, reducing air dead zones, and enhancing the customer experience.
- Sports Venues and Exhibition Centers: Suitable for sports arenas, convention centers, and other large event spaces, improving comfort and reducing stuffiness by providing strong airflow.
- Farms and Livestock Farms: Greenhouses, livestock farms, and agricultural facilities, used to lower temperatures, reduce humidity buildup, and improve air quality.
- Transport Hubs: Airports, train stations, subway stations, and other transport hubs, enhancing airflow in high-traffic areas and creating a more comfortable waiting environment.

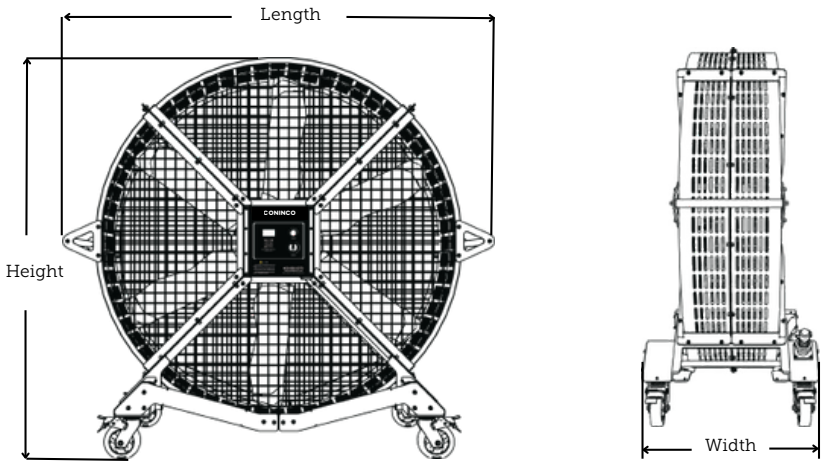
ProAir Portable Fans offer excellent airflow coverage, low energy consumption, quiet and efficient operation, and intelligent control, providing a comprehensive air optimization solution for industrial, commercial, and public spaces. It is one of the top-performing HVLS fan products available in the market today.



Technical Specifications

Fan	Diameter	Air volume,m³/min	Max speed	Input power	Full load current
PA6-16	5ft (1.6m)	723	360RPM	0.36kw	2.0A
PA6-20	6.5ft (2.0m)	1208	320RPM	0.55kw	2.7A

Fan	Weight	Size, LxHxW in mm
PA6-16	335 lb (152kg)	1881x1744x722
PA6-20	388 lb (176kg)	2181x2051x722

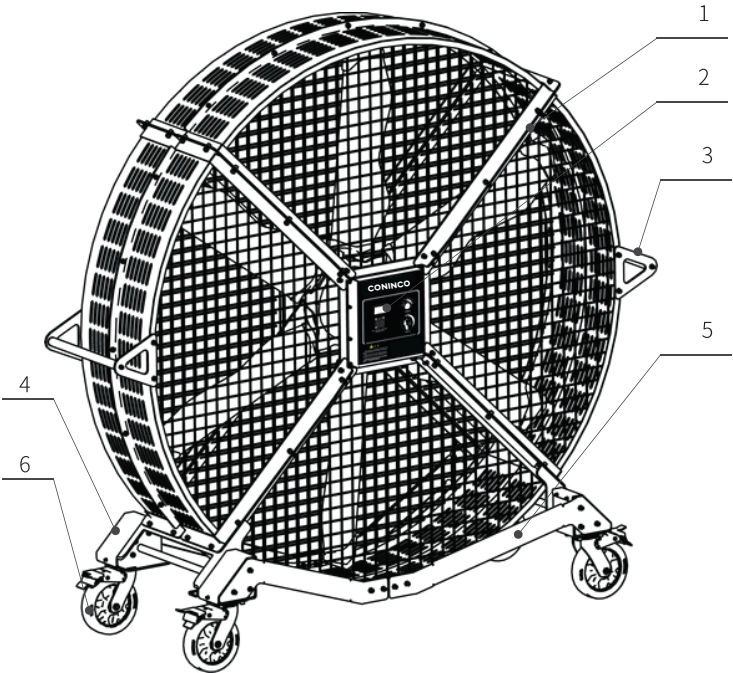


Others:

- Weight: weight of the product includes casters and other installation accessories, excluding power cord;
- Fan Diameter: The diameters listed above are standard product sizes; other specifications can be customized.
- Blade Color: The standard color is black, other colors are customizable.
- Driving motor: PMSM (permanent magnet synchronous motor);
- Input Power: Single-phase 220V $\pm$ 10%.
- The protection rating is IP55.
- Alternative Voltage Specifications Available Upon Request

Fan Diagram

Contact CONINCO if you are missing any parts or hardware needed for installation.



No.	Description	No.	Description
1	Metal Cover	4	Caster Cover
2	Fan Controller	5	Base Bracket
3	Handrail	6	Mobile Casters

Packing

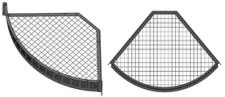
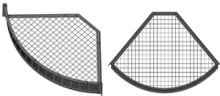
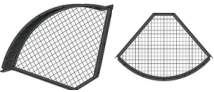
Please check that all components are present in the fan packaging before beginning installation. If you have ordered multiple fans, make sure to keep the components for each fan separate. The components are rated differently for each fan and are not interchangeable.

No.	Item Description	No.	Item Description
1	Main Unit	7	Base Bracket × 4 pcs
2	User Manual	8	Power Cord (with plug, 10A three-pin) × 1 pc
3	Handrail × 2 sets	9	Installation Tool Kit × 1 pack
4	Caster Cover × 3 pcs	10	Fastening Kit × 1 pack
5	Power Base Plate Assembly × 1 pc		
6	Mobile Caster × 4 pcs		

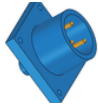
Tool list

No.	Tool	Qty.
1	4mm Allen wrench	1
2	5mm Allen wrench	
3	6mm Allen wrench	
4	8mm Allen wrench	
5	8mm open-end wrench	
6	16mm open-end wrench	
7	13mm open-end wrench	
8	cross screwdriver	

Parts List

No.	Part	Qty.	Diagram	Remarks
1	Caster (8 inch)	4		
2	Caster base	4		
3	Caster base fixing frame	2		
4	Connecting trim palte	4		
5	Net cover 1#	2		
6	Net cover 2#	4		Distinguishing method: the side arc has 2 fixing holes
7	Net cover 3#	2		Distinguishing method: the side arc has 2 fixing holes
8	Center plate 1#	1		
9	Controller connection bracket	4		

Parts List

No.	Part	Qty.	Diagram	Remarks
10	Fan blade connector	1		
11	PMS Motor	1		
12	Center plate 2#	1		
13	Fan blade	6		
14	Trunking frame 1#	1		
15	Trunking frame 2#	1		
16	Cable	1		
17	Industrial socket	1		
18	Caster cover plate 1#	1		

Parts List

No.	Part	Qty.	Diagram	Remarks
19	Caster cover plate	3		
20	Controller fixing plate	1		
21	Controller	1		
22	Center plate end cover 1#	1		
23	Center plate end cover 2#	1		
24	Metal joint	1		
25	Power cable baffle	1		
26	Hnadrail fixing plate	4		
27	Hnadrail	2		

Parts List

No.	Part	Qty.	Diagram	Remarks
28	Industrail plug	1		
29	Corrugated pipe for wiring	2		

Fastener List

No.	Fastener	Pcs
1	M5 Nut	2
2	MB Nut	60
3	M10 Nut	16
4	5mm Spring washer	32
5	6mm Spring washer	2
6	8mm Spring washer	140
7	10mm Spring washer	16
8	5mm Flat Washer	44
9	6mm Flat Washer.	2
10	8mm Flat Washer	200
11	10mm Flat Washer	16
12	M4x8 mm Cross Head Screw	4
13	M5x12 mm Socket Head Cap Screw	8
14	M5x16 mm Socket Head Cap Screw	2
15	M5x20 mm Socket Head Cap Screw	8
16	M5x25 mm Socket Head Cap Screw	4
17	M6x16 mm Socket Head Cap Screw	6
18	6x20 mm Socket Head Cap Screw	6
19	M6x16 mm Socket Head Cap Screw	2
20	M8x18 mm Socket Head Cap Screw	8
21	M8x20 mm Socket Head Cap Screw	94
22	M8x25 mm Socket Head Cap Screw	4
23	M8x30 mm Socket Head Cap Screw	2
24	M10x30 mm Socket Head Cap Screw	16

Fan Installation Guidelines

1. Pre-Installation Preparation

Note:

- When unloading the fan, handle it with care. Ensure the safety of personnel and place the product in a way that does not interfere with on-site operations or access routes.
- All fasteners must be tightened during assembly. After assembly, inspect and confirm all connections.
- During fan component assembly, unauthorized personnel should stay clear. Installers must observe safety precautions and follow the instruction manual strictly to avoid accidents.

Contents of the Wooden Crate:

- Caster wheel assemblies x4
- Base brackets x4
- Caster covers x3
- Power panel assembly x1
- Handrail assemblies x2
- Power cable (Industrial plug to 10A three-prong plug) x1
- Fastener kit x1
- Installation tool kit x1

Fastener Kit Includes:

- Hex socket bolts M5x16 (12 pcs)
- Flat washers $\phi 8$ (12 pcs)
- Spring washers $\phi 8$ (12 pcs)
- Hex socket bolts M8x16 (12 pcs)
- Hex socket bolts M8x18 (8 pcs)
- Hex socket bolts M8x20 (12 pcs)
- Hex head bolts M8x25 (12 pcs)
- Flat washers $\phi 8$ (44 pcs)

Installation Tool Kit Includes:

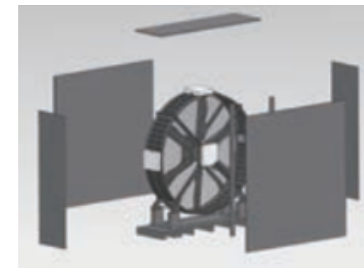
- Spring washers $\phi 8$ (44 pcs) and spare fasteners (extra bolts, flat washers, and spring washers)
- Hex key 4mm (approx. length 143mm) x2
- Hex key 6mm (approx. length 185mm) x2
- Open-end ratchet wrench 13mm (length 170–180mm) x2
- Phillips screwdriver $\phi 5 \times 80$ (shaft diameter 5mm, shaft length approx. 80mm) x2

Fan Installation Guidelines

2. Unpacking the Fan Main Unit

Step 1:

Remove the side panels of the wooden crate. Check that the fan is intact and securely fixed to the crate base (do not remove the self-tapping screws that secure the fan to the wooden base during this step). Then, remove the other three sides and the top panel of the crate.



Note: Have someone hold the fan to prevent it from tipping over. Do not use force when removing the panels to avoid damaging the fan.

Step 2:

Remove the side protective cover (polyethylene foam), top protective cover (polyethylene foam), and the waterproof plastic bag.



Step 3:

Remove the control panel cover (polyethylene foam) and the center panel end cap cover (polyethylene foam).

Fan Installation Guidelines

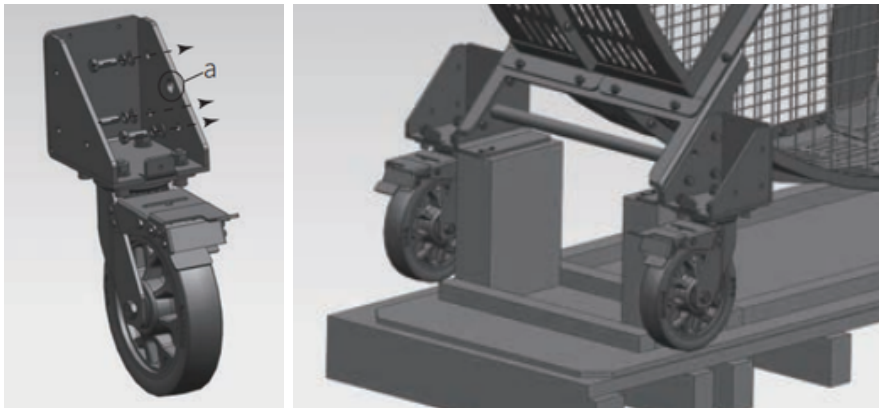
3. Installing the Caster Wheels

As shown, install 4 sets of caster wheels to the base of the fan. Each caster is secured using three sets of bolts (M8×25 + flat washer + spring washer).

Tools: Open-end ratchet wrench 13mm. First place the spring washer onto the bolt, followed by the flat washer.

Note:

When installing casters, the large round hole at point "a" should face the fan unit.



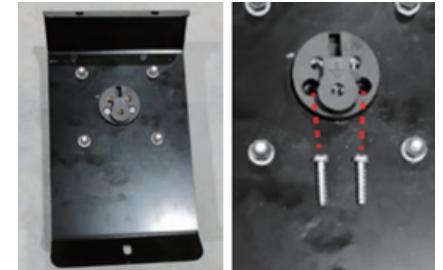
Fan Installation Guidelines

4. Installing the Power Panel Assembly

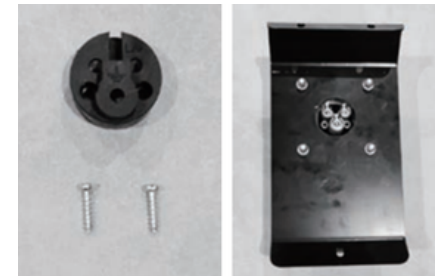
Step 1: Power Panel Preparation and Wiring

Tools: Phillips screwdriver $\phi 5\text{mm} \times 80$

1、 Find the power socket panel assembly and prepare for wiring. Loosen and remove the two fixing screws on the end face of the industrial socket cover (black part).



2、 Remove the industrial socket cover panel (black part) from the industrial socket.

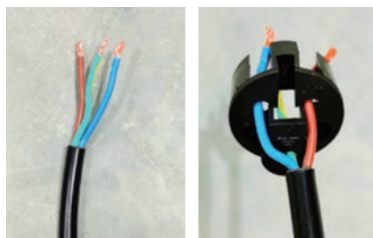


3、 Remove the three wiring copper terminals from the industrial socket (the copper terminal with the largest diameter and longest length is the grounding terminal).



Fan Installation Guidelines

4、Strip the power cable, leaving an appropriate length for wiring (the power cable with yellow-green insulation is the ground wire). Insert the three-core power cable into the three wiring holes of the industrial socket cover panel (note: insert the yellow-green insulated ground wire into the ground wire hole).



5、First, connect the ground wire to the copper terminal with the largest diameter and longest length (the grounding terminal), then connect the other two power wires, tightening the screws securely. Adjust the direction of the three copper terminals so that the screws securing the power wires face the opening of the industrial socket cover panel (the screw clearance position). Assemble the cover panel and the three copper terminals together onto the industrial socket.



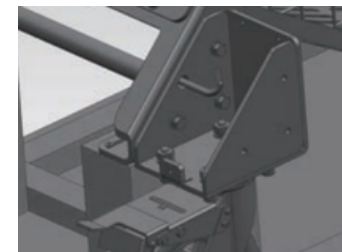
6、After confirming that the cover panel and the three copper terminals are properly assembled, tighten the two fixing screws on the end face of the industrial socket cover panel (black part) to complete the wiring.



Fan Installation Guidelines

Step 2: Installing the Power Panel Assembly

1、First, locate the side of the fan main unit with the power cable (as shown below). Pass the power cable through the large round hole on the fan main unit and caster assembly to prepare for wiring. The power socket panel assembly will be installed here.



2、Install the assembled power socket panel assembly onto the caster, securing it with three sets of hex socket bolts (M5*16) along with flat washers and spring washers



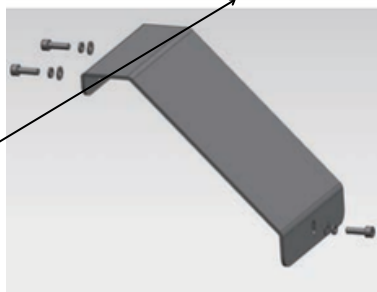
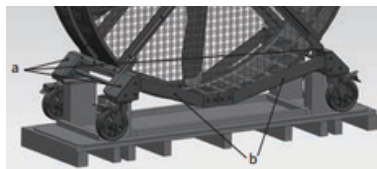
Fan Installation Guidelines

5. Installing Caster Covers and Base Brackets

1. Install the caster covers on the remaining three casters (at position a in the picture).

Each caster cover is fixed using three sets of hex socket bolts (M5*16) with flat washers and spring washers.

Tools required: 4mm hex wrench.
First, place the spring washer onto the bolt, then the flat washer, before installation.



2. Install the 4 base brackets (at position b in the picture).

Each base bracket is secured near the caster with three sets of hex socket bolts (M816) plus flat washers and spring washers, and near the central shaft with two sets of hex socket bolts (M818) plus flat washers and spring washers.

Tools required: 6mm hex wrench.
First, place the spring washer onto the bolt, then the flat washer, before installation.

Note: The 4 base brackets come in two pairs. Pay attention to the direction during assembly—the left and right brackets on the fan main unit side are symmetrical.



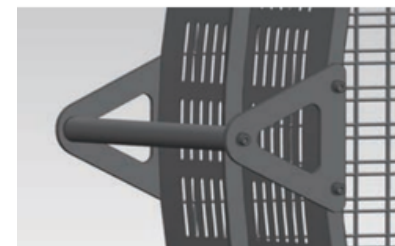
Fan Installation Guidelines

6. Installing the Handrails

Install the handle assemblies.

Each handle assembly consists of 2 handle mounting plates and 1 handle bar, forming one set. Each set is secured with six sets of hex socket bolts (M8*20) along with flat washers and spring washers.

Tools required: 6mm hex wrench.
First, place the spring washer onto the bolt, then the flat washer, before installation.



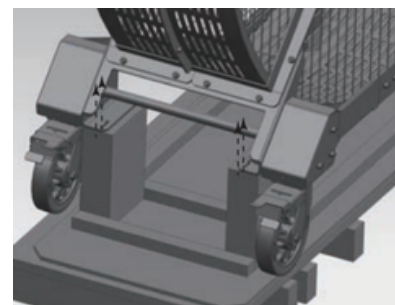
7. Completing the Installation

Remove the self-tapping screws (shown in the picture) that secure the fan to the wooden crate base. Take out the base support frame and slowly and steadily push the entire fan unit out from the bottom of the wooden crate.

Tools: Phillips screwdriver $\phi 5\text{mm} \times 80$.

Push the fan to a suitable position, unscrew the industrial socket protective cover, insert the industrial plug into the industrial socket, then tighten the plastic nut on the industrial plug onto the socket's threaded part to ensure the plug does not come loose when the fan is moved.

Plug the other end of the power cable with the three-prong plug into the customer's 220V power supply. Turn on the main switch knob on the control panel, and the fan will operate normally.



Safety Instructions

Prohibitions



- Do not bend or deform the fan blades during installation, adjustment, or cleaning. Doing so may result in damage to the fan or impair its performance.
- Ensure that the fan's input voltage matches the supply voltage before switching on the power.
- Do not perform any maintenance or repairs on the fan while the power is on to prevent the risk of electric shock.
- Unauthorized modifications to the fan's structure or mounting position are strictly prohibited.
- Do not open the electrical control cabinet while it is energized, as this may lead to electric shock hazards.
- Operating damaged equipment is strictly prohibited. Continued use may result in severe equipment failure or personal injury.
- Do not alter the configuration or parameters of the controller without authorization. Improper modifications may cause equipment malfunction or pose a safety risk.
- The fan controller contains high-voltage storage capacitors. When servicing the regulator, wait at least 3 minutes after power is disconnected to allow capacitors to discharge to a safe voltage level.
Note: The display turning off is not an indication that it is safe to proceed.
- Do not operate the fan in environments where the designated safety clearance is insufficient.
- Installation and wiring must be performed by personnel who have been certified according to our technical qualification standards.

Cautions



- Circuit layout and wiring must be conducted exclusively by professionally qualified technicians authorized by CONINCO.
- Only use parts and accessories specified or approved by CONINCO.
- Do not disconnect the power supply while the fan is operating. Power should only be turned off once the fan has come to a complete stop to prevent potential damage.
- After completing wiring, ensure that conductors are properly separated: the equipment grounding conductor must be placed on one side of the outlet box, and the grounded (neutral) conductor on the other side.
- Do not switch to the reset mode while the fan is running in forward (clockwise) rotation. Doing so may result in mechanical failure.

Troubleshooting

Common Causes of Failures

- The on-site power supply is invalid or not connected properly.
- After turning on the main switch, press and hold the "ON/OFF" button for more than 2 seconds, then press the "RUN/STOP" button. If the fan still fails to operate normally, please contact us immediately.

⚠ Non-professionals must not disassemble the controller!

For any repair or adjustment work, please contact us so that it can be handled by qualified technicians or engineers.

If any abnormal operation or unusual noise is detected, immediately stop the fan, disconnect the power supply, and contact us as soon as possible.

Note: Any damage caused by improper use will void the entire warranty.

CONINCO is not responsible for any personal injury or equipment damage resulting from failure to follow the instructions in this manual.

Importance of After-Sales Service

High-quality after-sales service plays a crucial role in ensuring the long-term and stable operation of fans.

To this end, CONINCO is committed to providing customers with premium products and comprehensive after-sales support.

We have established a global sales and service network to deliver timely, considerate, efficient, and all-around after-sales assistance—ensuring a worry-free experience for all our customers.

Technical Support

During the installation, commissioning, and operation of the fan, CONINCO will provide technical support in the following areas:

Product information, usage instructions, maintenance guidance, and product certifications. You can obtain technical support through the following channels:

- Visit website: www.conincofans.com for the latest technical documents
- Contact our after-sales support team: support@conincofans.com
- Reach out to your designated sales representative

Application Environment

Environment	Requirements
Installation site	Indoor
Operating Temperature	-15°C to +55°C Do not operate the fan in environments with rapid temperature fluctuations.
Humidity	<95%RH
Altitude Range	<4000m
Others	The fan should be installed in an environment that meets the following conditions: • No presence of corrosive, flammable, or explosive gases. • Free from airborne metal particles, oil mist, excessive humidity, or other foreign substances. • Minimal exposure to salt spray or corrosive agents.

Warranty & Maintenance

The product is designed to be maintenance-free under standard operating conditions. However, to ensure long-term and stable performance—especially when used in harsh environments—regular maintenance is still recommended. Before performing any maintenance on the fan or controller, always ensure the fan is completely stopped and the controller's power supply is disconnected to ensure personnel safety.

Recommended Maintenance Schedule and Tasks:

During trial operation:
Check for any abnormal noise or vibration during fan operation.

Every 2,500 operating hours:
Clean the controller and fan blades.

Every 5,000 operating hours:

- Inspect all fasteners for signs of loosening.
- Check all cables for any signs of damage.

If noticeable noise or vibration occurs during fan operation, it may indicate mechanical component failure. In such cases, immediately disconnect the power supply and perform a thorough inspection.

Product Warranty Policy

Warranty Period: one (1) year from the date of delivery of the complete unit.

Warranty Claims:

If any product failure occurs within the warranty period, do not attempt to disassemble or repair the product yourself. Please contact your local CONINCO representative as soon as possible. However, CONINCO reserves the right to charge for repair or service under the following circumstances:

- Failure caused by improper installation, handling, or operation;
- Failure resulting from unauthorized modification or alteration of CONINCO products;
- Damage due to natural disasters, fire, or other force majeure events;
- Failure occurring after the expiration of the warranty period;
- Any other malfunction or damage not attributable to CONINCO.

Quality Assurance:

All CONINCO products are manufactured under a strict quality management system. Each unit undergoes comprehensive testing and inspection prior to delivery to ensure reliability and performance.

Control Cabinet User Manual



LCD display status information

After the controller is powered on, when the switch points to ON, the machine is powered on, and the LCD displays: given rotating speed, operating current, input voltage, operating status, whether "output rotating speed" is locked, failure interface and other specific interface information as follows:

Operating interface <table><tr><td>Fan Speed</td><td>Run</td></tr><tr><td>50 RPM</td><td></td></tr><tr><td>1.5 V</td><td></td></tr></table> Top left: setting rotating speed Lower left: Voltage Right: operating	Fan Speed	Run	50 RPM		1.5 V		Accelerating interface <table><tr><td>Fan Speed</td><td>Accel</td></tr><tr><td>50 RPM</td><td></td></tr><tr><td>1.5 V</td><td></td></tr></table> Top left: setting rotating speed Lower left: Voltage Right: Accelerating	Fan Speed	Accel	50 RPM		1.5 V		Standby interface <table><tr><td>Fan Speed</td><td>Standby</td></tr><tr><td>50 RPM</td><td></td></tr><tr><td>1.5 V</td><td></td></tr></table> Top left: setting rotating speed Lower left: Voltage Right: Standby	Fan Speed	Standby	50 RPM		1.5 V	
Fan Speed	Run																			
50 RPM																				
1.5 V																				
Fan Speed	Accel																			
50 RPM																				
1.5 V																				
Fan Speed	Standby																			
50 RPM																				
1.5 V																				
Setting interface <table><tr><td>Set</td></tr><tr><td>S00 Return</td></tr><tr><td>S01 Speed lock</td></tr><tr><td>S02 Motor learning</td></tr></table> Line1: Setting Line2: S00 Return Line3: S01 Rotating speed unlocked Line4: S02 Motor Self-learning	Set	S00 Return	S01 Speed lock	S02 Motor learning	Decelerating interface <table><tr><td>Fan Speed</td><td>RUN</td></tr><tr><td>50 RPM</td><td></td></tr><tr><td>1.5 V</td><td></td></tr></table> Top Left: Setting rotating speed Lower Left: Voltage Right: Decelerating	Fan Speed	RUN	50 RPM		1.5 V		Failure interface <table><tr><td>Error code</td><td>ER</td></tr><tr><td>E.O.L.F [1909]</td><td></td></tr><tr><td>Contact us</td><td></td></tr></table> Top left: Failure code Lower left: Please contact factory Right: ER Logo	Error code	ER	E.O.L.F [1909]		Contact us			
Set																				
S00 Return																				
S01 Speed lock																				
S02 Motor learning																				
Fan Speed	RUN																			
50 RPM																				
1.5 V																				
Error code	ER																			
E.O.L.F [1909]																				
Contact us																				

User Setting Interface Description

In standby state, long press (more than 2 seconds) the knob to enter the "Setting interface". The setting interface provides the following functions:

Function code	Description	Detailed Explanation
S00	Return	Used to return to main interface. If not manually returned, the system will automatically return to main interface after 10 seconds.
S01	Speed Lock	When locked: The adjustment knob cannot change the set rotation speed (prevents accidental operation). Select this function again to unlock.
S02	Motor Self-learning	Improves motor control performance after completing self-learning process.
S03	Operation Direction Switch	Allows reversing motor rotation direction if it's running incorrectly.

Control Cabinet User Manual



LCD Screen
Start speed switch
Rotation button

Operation Instructions

1. Please read the precautions very carefully before you start use.
2. Please confirm the wirings have been connected correctly, then turn the main knob to "ON". Now it's powered on.
3. Press twice "start speed switch" to use "start speed switch" to control the rotation speed.
4. Press twice "rotation button" to stop the motor. Then turn the main knob to "OFF" the rotation completely stop.
5. You can also achieve the operation guide by scanning the QR code.

Function Description:

1. LED display: The user does not have any operation on the product within 1 minute, the LCD screen turns from bright to dark, and the brightness is restored after operation.
2. Main switch: When the switch points to OFF , it powered off; when the switch points to ON , it powered on.
3. Rotation speed button: multi-function knob. Please check the above table to know the details.

Function	Ajust rotation speed	Start,Stop button	Malfunction reset
Definition	Clockwise rotate the "Rotation speed" button to increase speed, and anticlockwise to slow down the speed.	Press once "Rotation speed" button to start and stop.	When malfunction appears, press once "Rotation speed" button to reset it. if the reset doesn't work you should contact CONINCO following the guide shown on screen.
Notice: Short press of "Rotation speed switch": the duration is less than 2s; Long press of "Rotation speed switch": more than 2s.			



ATTENTION

Warning: Before operation please read the manual very carefully. Remove obstacles in the operating area to ensure that the fan runs with safe distance. Before operate any maintenance please make sure you already turned off the power supply. The operation must be done by professionals to avoid being injured.

How to start:

- Make sure that there are no obstacles and potential hazards in the fan operating space.
- Make sure that the input power is correct and meet the product requirements.
- Make sure that the speed knob points to the minimum position.
- Start the equipment and turn the switch from "stop" to "run".
- After the fan runs, adjust the rotation speed knob to achieve the best effect.

How to stop:

- Stop the equipment and shut down the controller strictly according to the operating instructions;
- Please do not cut the power off during the running.

Failure recovery

Common reasons for the fan not working properly:

- The external power supply of the control box is invalid.
- If you turn on the main switch but the fan still does not run, please contact CONINCO to communicate with our professional engineers.

Non-professionals are strictly prohibited from opening the controller box!

If maintenance or adjustment is required, the operation must be performed by professionals trained by CONINCO or under the guidance of our company's engineers.

If you find any damage or abnormal noise, please stop the operation as soon as possible, cut off the power, and contact CONINCO after-sales service department.

Note: Equipment damage caused by abnormal use is not contained by the product warranty of CONINCO. CONINCO shall not be liable for personal injury and equipment damage caused by your failure to comply with the contents of this manual.

Error Code Description

Failure, warning

Notice:

When the product has a fault code, please press the knob button to reset the fault; if the fault cannot be reset, please contact CONINCO.

ER Code	Description
E.oCl/E.oC2/E.oC3	Acceleration/deceleration/constant speed/over current
E.oUl/E.oU2/E.oU3	Acceleration/deceleration/constant speed/overvoltage
E. Lu	Undervoltage during operation
E.oLl	Motor overload
E.OL2	Controller overload
E.iLF	Input phase loss
E. oLFxx	U/V/W Phase output phase loss
E.oH2	IGBT Module over temperature
E.TExx	Self-learning output current exceeds limit
E.SPD	Rapid failure

Notice:

The number xx after the above fault indication indicates a fault occurred in a certain phase of a three-phase circuit under different operating conditions.

Common fault display and countermeasures:

When a fault occurs, the controller cannot operate. The following table explains the cause of the fault and corresponding measures. Note: All faults must be reset to eliminate them.

Error Code Description

Code	Desa	Reason	Solution
E. oCxx	Mid- acceleration/mid-decceration/mid-speed/over-cu rrent fault	Overload	Reducing load or replacing impulse load of large capacity controller requires reducing load change frequency or replacing larger capacity controller
		Short circuit to the output side of the controller	Check main circuit, diminate short circuit
		Motor damaged	Measure the resistance between the lines of the motor and replace the motor immediately if conduction
		Too short acceleration/deceleration time	Increase F01.22 [acceleration time 1] increase F01.23 [deceleration time 1] replace bulk control
		Overvoltage suppression of rising frequency may result in accelerated overcurrent fault	Decrease overvoltage gain F10.13(overvoltage gain)
		Overflow su ppression of frequency reduction resultingin deceleration over current fault	Increase overcurrent suppression gain F10.02 [overcurrent suppression gain]
		Controller output cable exceeds allowable maximum	Shorten output cable or add sinusoidal filter
		Mis-operation caused by interference	Check the wiring of control circuit, main circuit and ground, remove interference source

Notice: this fault is detected when the output current of the controller exceeds the overcurrent point

Code	Desa	Reason	Solution
E. oUxx	Mid- acceleration/mo derate/mid-speed/stop/over - voltage fault	High voltage	Reduce the supply voltage to a specified rang
		Controller output or motor short circuit	Check main circuit wiring,eliminate short circuit
		Too short acceleration/deceleration time	Determine whether the acce[eration stops. The fau[lt detection increases F01.22 [acceleration time 1] increases F01.23 [deceleration time 1]
		Overvoltage suppression of frequency rise may result in accelerated overvoltage fault	Increase overvoltage suppression gain F10.13 [overvoltage suppression gain]
		Over-current suppression of frequency-lowering overvoltage fault	Decreasing overcu rrent suppression gain F10.02 [overcurrent suppression gain] and reducing load
		Surge voltage mixed with input voltage	Add reactor to input side
		Improper setting of speed tracking parameters	Change of Speed Tracking Parameters (F07.25~F07.28)

Notice: this fault is detected when the bus voltage exceeds the overvoltage point Three-phase input overvoltage point is 820 V, single-phase input overvoltage point is 400 V.

Error Code Description

Code	Desa	Reason	Solution
E. Lu	Under pressure in operation	Power outages or instantaneous power outages	Check power and reset
		Input Power Lack Phase	Confirmation of Main Circuit Wiring
		Excessive input voltage fluctuations	Improve the power supply to meet the rated voltage of the controller if the main circuit power supply is no problem, check the main circuit side of the electromagnetic contactor whether there is a problem

Notice: this fault is detected when the bus voltage is lower than the under voltage protection point (F10.19) when the controller is running.

Code	Desa	Reason	Solution
E.oLl	Motor overload	Overload	Reduce the load and increase the curve coefficient of overload protection
		Acceleration and deceleration time set too small	Increase F01.22,F01.23 (Acceleration and deceleration time)
		Torque lift set too large	Decrease F04.01 [torque increase]
		V/F curve setting is not appropriate+	To determine the relationship between voltage and frequency of V/F curve setting, modify F04.00 [VF curve setting] ; Modify the custom V/F curve related parameters (F04.10~F04.19)
		The characteristics of electronic thermal relay are inconsistent with the characteristics of motor load.	Use of external thermal relays
		Abnormal output current due to input missing phase	Check the main loop to remove input phase

Code	Desa	Reason	Solution
E.oL2	Controller Overload	Overload	Reduce load Increase the curve coefficient of overload protection of motor
		Acceleration and deceleration time set too small	Increase F01.22、 F01.23 [acceleration and deceleration time] Decrease F04.01 [torque increase]
		Torque lift set too large	Decrease F04.01 [torque increase]
		V/F curve setting is not appropria	To determine the relationship between voltage and frequency of V/F curve setting, modify F04.00 [VF curve setting] Modify the custom V/F curve related parameters (F04.10~F04.19)
		Abnormal output current due to input missing phase	Check the main loop to remove input phase

Error Code Description

Code	Desa	Reason	Solution
E.iLF	Input missing phase	Loosening of main circuit terminal of controHer	Tighten the screw and restart
		Excessive input voltage fluctuations	Improve the power supply to meet the rated voltage of the controller if the main circuit power supply is no problem, check the main circuit side of the electromagnetic contactor whether there is a problem
		Three-phase voltage imbalance	Confirm if there is a problem with the input voltage and improve the power imbalance

Code	Desa	Reason	Solution
E.oLFxx	Output Missing Phase	Controller output side U/V/W/ phase break	Check that the motor U/V/W/ phase connection is normal check that the controller output terminal screw is loose
		Motor damage	Measure the resistance between the motor wires, and replace the motor immediately if it is connected
		Low motor power	Reset controller or motor power

Code	Desa	Reason	Solution
E.oH2	IGBT module overheating	Excessive ambient temperature	Reduce the ambient temperature of the controller
		Overload	Reduce load Decreased F01.40[Carrier Set]
		Fan fault	Make sure that the fan is running normally. When the fan is abnormal, replace the fan and start up again

Code	Desa	Reason	Solution
E.TExx	Self-learning failures	The output current of the controller exceeds the upper and lower limits	Check if the motor connection is correct, re-learn after reset, still report failure to seek factory support

Notice: where "xx" is self-learning fault sub code.

Error Code Description

Code	Desa	Reason	Solution
E.SPD	Rapid failure	Controller application failure	Seek technical support from manufacturers
		Improper setting of relevant parameters for rapid detection	Rapid Detection Threshold and F10.45 [Rapid Detection Time]

Notice: the percentage of output motor speed relative to F01.10 [maximum frequency] is greater than F10.44 [rapid detection threshold], and the fault is reported after continuous F10.45[of rapid detection time. By F10.43 [the rapid protection action], the fault detection and the motor operation mode can be set when the fault is detected.