

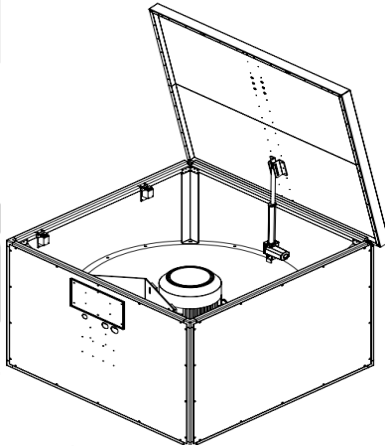


FAN MÜHENDİSLİĞİ

USER MANUAL

LOBBY TYPE
AXIAL FAN SERIES
FOR ROOFS

AIR-AU SERIES



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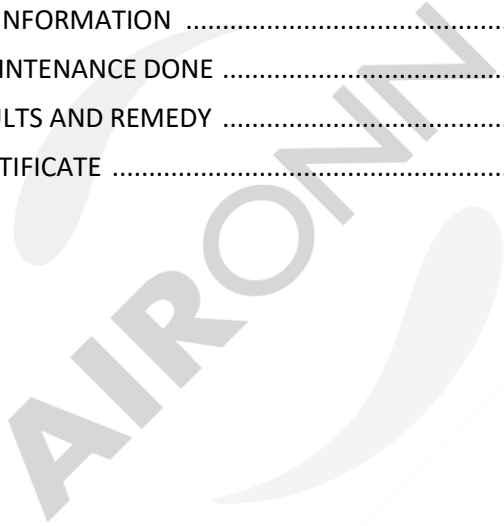
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COMPANY INFO

AIRONN HAVALANDIRMA VE KLİMA SİSTEMLERİ SAN. DİŐ TİC. LTD. ŐTİ

HEAD OFFICE : ÇAMLIK MAH. SENOL GÜNEŐ BULVARI NO: 28/A
ÜMRANİYE/İSTANBUL

FACTORY : KARATEPE MAH. CUMHURİYET CAD. MERA SOK. NO:13
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WARRANTY and SERVICE

We kindly ask you to follow the recommendations below;

1. When you purchase your product, it is necessary to have the Warranty Certificate approved by your Authorized Dealer. don't forget.
2. Follow the instructions in the user manual while using your product. This warranty given by AIRONN Ventilation does not cover the elimination of malfunctions caused by using the product other than the instructions specified in the user manual. In addition, the following situations are not covered by the warranty. are held:
 1. Damage caused during transportation, loading and unloading after the delivery of the product to the customer, and malfunctions,
 2. Fire, earthquake, lightning strike, etc. damage caused by natural disasters such as malfunctions,
 3. Incorrect electrical installation, undervoltage or excess, damage to occur if the product is used at a voltage different from the voltage on the label, and malfunctions,
 4. Damage caused by user errors and malfunctions.
3. Elimination of the above-mentioned damages and malfunctions is done by determining a fee according to the size of the damage and malfunction. The transportation of the product and its assembly to the place where it will be used are excluded from the product price.
4. The responsibility of giving this warranty certificate to the customer after approval is on the seller, dealer, agency or representatives from whom the consumer purchased the product.
5. Since the invoice date will be taken as a basis in case of any dispute during the warranty period of the product, the user should keep the invoice or a legible photocopy of the product together with the Warranty Certificate.
6. In the event that the Warranty Certificate of the product is changed, the original serial number on the product is removed or changed, the Warranty Certificate of the product is invalid.

WARRANTY CONDITIONS

- The warranty period is 24 hours after the delivery date of the product. month.
- All parts on the product are guaranteed under the assurance of AIRONN Ventilation. covered.
- In case of a possible malfunction of the product, the repair cannot exceed 20 working days and the repair period is added to the warranty period. The repair period starts with the user notifying the product malfunction to the service station, or if there is no service station, to any of the product's seller, dealer, agency, representative, importer or manufacturer. Failure notification can be made by the consumer by telephone, e-mail, fax, registered letter with return receipt, etc. ways can be done. However, in case of a possible dispute, the burden of proof lies with the consumer. If the defect of the product is not remedied within 10 working days, the manufacturer or the importer company shall offer another product with similar features to the use of the consumer until the repair of the product is completed. required.
- If the product suffers a malfunction due to material, workmanship and assembly errors within the warranty period, it will be repaired without demanding any labor cost, replacement part fee or any other price.
- Elimination of malfunctions caused by using the product other than the instructions specified in the user manual is not covered by the warranty.
- For any problem that may arise regarding the Warranty Certificate, the Ministry of Customs and Trade, General Directorate of Consumer Protection and Market Surveillance can be applied.
- Consumers submit their applications regarding their complaints and objections to consumer courts and consumer arbitration committees. they can.
- Despite the consumer's right to repair the product;
 - From the moment it is delivered to the consumer, at least 4 (four) times within a year, within the specified warranty period. either in producer or importer by set guarantee

In case of malfunction 6 (six) times within the period and in case of not being able to benefit from the goods caused by these malfunctions,

- Exceeding the specified maximum time for repair in case of,
- It is determined that the repair of the malfunction is not possible with a report to be issued by the company's service station, or by any of the seller, dealer, agency, representative, importer or manufacturer, respectively, in the absence of a service station. in case of,

The consumer may request a free replacement of the product, a refund or a discount at the rate of the defect on the sales price.

- If the product is found to be defective consumer;
 - I. from the contract by declaring that he will return the sold product. rotation,
 - II. Withholding the sold product and requesting a discount on the sales price at the rate of defects,
 - III. In cases where the defect of the product does not require excessive costs, request the free repair of the sold product at the seller's expense. don't,
 - IV. If possible, request the replacement of the sold product with a non-defective one. don't,

It can only use one of its optional rights. The seller is obliged to fulfill this demand preferred by the consumer.

SPECIAL WARRANTY CONDITIONS

1. Our company is responsible for the damage that may occur during the transportation and installation of the customer. is not.
2. Failures that may occur during the warranty period are only repaired by our company's service personnel or service personnel who have received the necessary training and are authorized by us. The warranty is void if other persons interfere with the machine without our written agreement.
3. The warranty given by our company is valid if the machine is used as described in this user manual, otherwise the warranty is valid. is void.
4. If the warranty document has been tampered with, the original serial number has been removed or tampered with, this warranty will be voided. falls.
5. The warranty given in this document is valid if the obligations and responsibilities of the customer written in the user manual and catalog are completely fulfilled.

USER RESPONSIBILITIES AND WARRANTY

AIRONN is in no way responsible for the following except those included in this user manual. cannot be held.

- All kinds of laws and norms do not allow. from uses
- Inappropriate and unsuitable of the area and structure where the machine will be used. to be
- Non-compliance or incorrect use
- Electricity not suitable for the specified electrical installation use
- Any kind not made by authorized people's modification
- out of the performance of the machine use
- Necessary maintenance failure to do
- Trained personnel external machine use
- non- original and manufacturer's use of non-approved spare parts



ANY MODIFICATION ON THE MACHINE IS PROHIBITED !!!

PRODUCT INFORMATION

PRODUCT DESCRIPTION

Aironn Lobby Type Roof Fresh Air Fan series fans max. It is suitable for operation at 55 °C. Backstage Axial Roof Type Fresh Air fans, which are offered in the diameter range of 400 mm – 1250 mm, prevent heat transfer under normal conditions thanks to their motorized retractable cover and 50 mm thermal insulation. The lid, which opens and closes automatically, can lift the distributed snow load on the lid up to 1000 N thanks to its powerful motor. Information about the open or closed status of the cover can be obtained through the switch on the fan. The body, which is designed to be waterproof inside, is made of stainless galvanized steel material, and a special paint can be applied in the desired color upon demand. Thanks to its 50 mm thermal insulation, it prevents heat loss between indoor and outdoor conditions in different weather conditions. The performances of Aironn Lobby Type Roof Fresh Air Fans are tested in accordance with AMCA 210-07 standard. has been done.

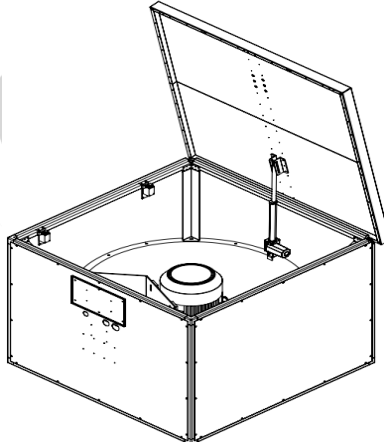


Figure – 1: Axial Lobby Roof Type Fresh Air Fan Series

Fan Body

The body of the fans is made of high quality sheet metal and coated with corrosion-resistant hot-dip galvanization. Fan flanges are manufactured by bending from the body and thus the fans are self-flange. It is produced as a long body as standard. With body maintenance cover option is offered.

Wing

Wings with aerodynamic structure are manufactured from ETIAL 171 material by injection molding method and are statically and dynamically balanced according to ISO 1940/1-2003.

Engine

IP 55 motors with F insulation class had 2 motors offered with single-speed or double-speed options. If desired, single-speed motors are suitable for inverter use.

Electric

IP 55 electrical junction box made of plastic material is offered as standard.

Accessory

Counter Flange, Non-Return Damper, Wire Cage, Flexible Connection, Pako Switch, Vibration Sensor, Inverter.

AIRONN AIR-AU SERIES FAN LABEL






	AIRONN HAVALANDIRMA VE KLİMA SİSTEMLERİ SAN. DIŞ TİC. LTD. ŞTİ.			
	Karatepe Mah. Cumhuriyet Cad. Mera Sok. No:13 Kartepe / Kocaeli Tel:0 216 594 56 96 Fax:0 216 594 57 17 www.aironn.com.tr - info@aironn.com.tr			
SİPARİŞ NO ORDER NO			HAVA DEBİSİ (m3/h)	
SERİ NO SERIAL NO			AIR VOLUME (m3/h)	
CİHAZ KODU ITEM CODE	AIR-AU		STATİK BASINÇ (Pa) STATIC PRESSURE (Pa)	
CİHAZ MODELİ MODEL NO	AKSİYAL KULİSLİ ÇATI TİPİ TAZE HAVA FANI		MOTOR kW	
			DEVİR/SPEED rpm	
			NOMİNAL AKIM	
*** TEST EDİLMİŞTİR Made in Turkey		 TSE-K 453		

Figure – 2: Axial Lobby Type Roof Fresh Air Fan Series Label Example

AREA OF USE

AIR-AU Series Axial Lobby Type Roof Type Fresh Air Fans; It is used for pressurization in systems such as stairs and elevator shafts, and for fresh air supply in systems such as parking lots, hospitals, warehouses.



**THE INTENDED USE OF THE MACHINE IS CLEARLY STATED
IN THIS MANUAL. THE MACHINE, EXCEPT FOR THESE
PURPOSES**

USING IS STRICTLY PROHIBITED !!!

Any damage that may arise from the use of the machine other than its intended use is beyond the responsibility of AIRONN.

The machine's usage capacity is limited by the duct sizes on the label. AIRONN cannot be held responsible for any damages that may arise from using the machine above the specified capacity.

- AIR-AU Series Axial Lobby Type Roof Type Fresh Air Fan are designed for pressurization and fresh air supply only. AIRONN does not accept responsibility for negative situations that may occur in case of operations different from its function with the machine.

PACKAGING CONTENT

- 1 x Axial Lobby Type Roof Type Fresh Air Fan
- 1 x User Manual

GENERAL NOTES ABOUT THE MACHINE

All modification works on the machine other than authorized personnel are prohibited. The manufacturer does not allow any misuse without its permission.

If the instructions in the user manual are not followed will occur no danger damage or any situation AIRONN VENTILATION AND AIR CONDITIONING SYSTEMS Ltd.' It cannot constitute a good binding reason . Giving all kinds of training and information to the user personnel in accordance with the employer CE norms has to. This why the machine without using before This use The manual must be read and understood by the user .



THE MACHINE CAN ONLY BE USED BY AUTHORIZED OPERATOR!

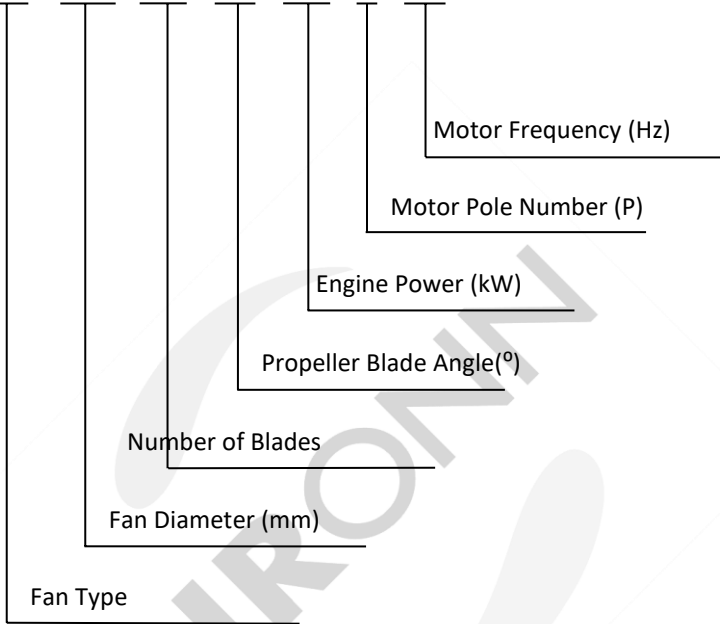
The machine always complies with the necessary safety precautions if the instructions given in the MAINTENANCE INFORMATION section are followed. These instructions are intended as a precaution against any safety risks that may occur for personnel using the machine. given. **of the machine full capacity And productive study fully complied with the instructions in this booklet. If provided .** This booklet should be kept in an easily accessible place as long as the machine is in use, and any changes and warnings made by the manufacturer should be indicated on the booklet. If the machine is sold to another user, the relevant booklet must be delivered.

The manufacturer does not allow the reproduction and copying of this booklet for any reason and all rights are reserved. All kinds of pictures and drawings in the booklet serve as a guide. The manufacturer reserves the right to remove, delete and change them.

The machine is delivered to the customer with a label attached to the machine with the identification information on it.

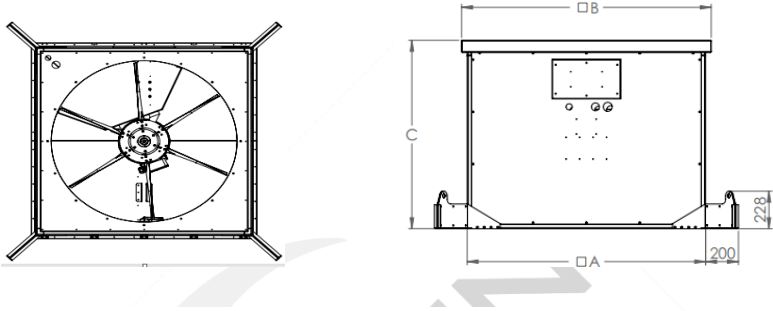
ABBREVIATIONS

AIR - XX / XXX - XX - XX / XX - X - XX



AU – Axial Fan

OVERALL DIMENSIONS



Model	A	B	C
400	610	680	900
450	660	730	925
500	710	780	950
560	770	840	975
630	840	910	1000
710	920	990	1025
800	1010	1080	1050
900	1110	1180	1075
1000	1210	1280	1100
1120	1330	1400	1125
1250	1460	1530	1150

Figure – 3: Axial Lobby Type Roof Fresh Air Fan Series General Dimensions

GENERAL SAFETY INSTRUCTIONS

****In this section, the safety instructions that must be followed during the transportation, installation, use, maintenance and scrapping of the machine are given.**

WARNING LABELS ON THE MACHINE



Electric Shock



Caution



Spinning
Machine
Warning



Hand Jamming



Grounding



Under Load

Hazard Standstill

Figure – 4: Warning labels on the machine

**** These pictures and tags are for illustrative purposes only. It may not exactly match the labels on the delivered machine.**

DURING HANDLING AND SHIPPING

In order for your product not to suffer any damage during transportation;

- While packaging the product, care was taken to ensure that it was suitable for normal transportation conditions. Always in its original package to avoid possible damage or damage. must be moved.
- Lifting and loading should only be done by authorized and qualified personnel. should be done.
- in the rain or wet conditions should not be kept waiting.
- The products should be placed in such a way that they remain completely immobile in the vehicle in which they will be transported, in order to avoid a possible tipping or falling situation.
- The product should be stored in its own package so that it is not exposed to any vibration, dust, abrasive or chemical substances until it reaches the place where it will be installed. Accept products that are not in their original packaging or that you find to be opened when they reach you. Please do not.
- Appropriate levers to prevent damage to the product and the people carrying it during the transportation of heavy products. should be used.
- Take all necessary measures to prevent damage caused by careless, rapid lifting and lowering. should be taken.

After the product is unpacked;

- Check the accuracy of the product you receive Please pay.
- The product should be checked for damage during transportation. If there are missing or damaged parts/parts, **the shipping company** and **Aironn Logistics Department official** should be informed immediately, verbally and in writing .
- When receiving the devices in the field, check on the delivery note that the parts (vibration mount, counter flange, etc.) that are shipped separately and unassembled from the device are sent in a separate box. Keep these materials in a safe place. do it.
- If there is any damage during transportation, take photos of the damaged products and take a record, and immediately report to the **Aironn Logistics Department representative** and **the shipping company** . please report.
- The product should not be lifted by holding the electrical cables or the junction box. Situations that will damage the wings during transportation should be avoided.
- During the transportation process, personnel, hard hats, gloves and steel-toed shoes should wear.

Follow the instructions below during handling and shipping;

- 1- Make sure that the packaging of the products is done correctly and securely before putting them on the transport vehicle. should be.
- 2- Before lifting or transporting the fan or its accessories, determine the following: Please:
 - Total weight and weight center
 - The largest external dimensions
 - of lifting points their place
- 3- The load-bearing capacity of the vehicle used is suitable for the weight of the fan and its accessories. should be.
- 4- After all safety conditions are met, the removal process should be started.
- 5- Never stand under or near the lifted load. 6- To move the device to the platform, outside
The correctly extended part should not be used as a fulcrum. To transport the device to the platform, use the eyebolts fixed to the device only for the purpose of carrying it or the large holes in the base base. should be used.
- 7- The device must not be tilted or tipped over during transport or lifting.
- 8- When removing the units from the truck by forklift, make sure that the load is evenly distributed on the forklift's forks and that the forks do not hit the body of the device and the base frame. should be.
- 9- In case the units are taken from the truck by crane/crane, it should be ensured that the load is evenly distributed and steel rope should not be used as lifting equipment. The parts of the device in contact with the rope should be protected.
- 10- If another lifting method is used, suitable lifting chocks under the device to perform the lifting operation. should be placed.
- 11- During the lifting and placement of the devices, care should be taken against severe impacts and necessary precautions should be taken. should be taken.
- 12- The products are fixed to the transport vehicle must be moved.

- 13- The process of unloading the products from the vehicle must be done with the precision specified for the loading process.



PLACING ANY MATERIAL, TOOLS OR LOAD ON THE PRODUCTS IS PROHIBITED!

***** AIRONN cannot be held responsible for any negative situation that may arise during the transportation of the product.***



DURING INSTALLATION AND PLACEMENT

Follow the safety instructions below during installation and placement;

- The products should be transported safely to the place where they will be used in the enterprise with suitable vehicles.
- The products are placed on the floor slowly and in the correct position. must be downloaded.
- In the installation process of the products, electricity in the system should not be.
- Before making product connections, it should be ensured that the product is securely mounted on the wall, floor or in the places specified in the project. If the product is to be mounted on the wall, mounting brackets or clamps must be used.
- Fans are not ready-to-use products when unpacked. After the product is attached to its places as specified in the project and the protection grilles are installed. should be run.
- Gloves during handling and assembly should be used.
- Fans are used in environments where dusts at risk of explosion may be in the duct. should not be used.
- Necessary measures to prevent backflow in the room that a possible gas leak (open gas pipes, other fuel burning devices, etc.) will create should be taken.
- Before connecting the fan to the mains, the body should be checked for any damage. In addition, it should be checked whether there are foreign objects in the fan impeller and suction section. should be removed.
- Any obstructions in the airflow path should not be.
- The fans are fed with three-phase 380 V / 50 Hz alternating current. Before applying electrical energy, it must be checked from the label.
- When the machine is decommissioned, shipped to another location, comply with the handling and shipping instructions. must be moved.

DURING THE OPERATION

The machine described in the user manual has been manufactured according to the appropriate principles, taking into account the applicable law. The machine is equipped with necessary technical solutions and devices to prevent any risk of accident.

Observe the following safety instructions during operation:

- Personnel on the machine for any reason while the machine is in operation should not exist.
- The machine should only be used by a trained and authorized operator.
- Before operating, it should be ensured that the protection grilles are connected.
- While the fan is running, never put your hands into it. should not be inserted.



***IT IS ABSOLUTELY PROHIBITED BY STANDING ON THE MACHINE
WHEN IT IS WORKING!***

***** These prohibitions are partially violated by trained maintenance engineers who investigate to detect faults on the machine and verify the causes of anomalies. can be done.***

DURING MAINTENANCE

During the periodical maintenance of the machine, signs with the warning statement 'machine is in maintenance' should be placed on the machine and in the area where the maintenance is performed. Maintenance operations should only be carried out by trained and competent personnel.

Observe the following safety instructions during maintenance:

- The machine must be used strictly with water / pressurized water. should not be cleaned.
- It is dangerous and prohibited to perform maintenance while the machine is in the air. Maintenance work, after the machine has been lowered to the ground should be done.
- Before any maintenance is applied to the machine, the electrical connection should be made from the main line. should be cut.
- Maintenance operation after the machine is completely stopped so that the maintenance personnel do not encounter the limb pinched or crushed. should be done.
- Hand tools to be used during maintenance should be sound and safe, equipment that is defective or damaged should not be used.
- Personal protective equipment when working with power tools (grinders, drills, etc.) should be used.
- During electrical maintenance, energized electrical cables must be replaced or repaired in a way that does not pose a danger to life safety.
- The work area to be maintained should be illuminated so as not to cause any work accidents and to facilitate the work of the maintenance personnel.
- If there are flammable explosive materials around the area to be serviced should be removed.



THE ELECTRICAL CONNECTION OF THE MACHINE MUST BE DISCONNECTED COMPLETELY BEFORE STARTING THE MAINTENANCE PROCESS!



MAINTENANCE OR REPAIR SHOULD NEVER BE DONE WHILE THE MACHINE IS WORKING!

**** While some parts of the machine are routinely checked and maintained, the machine may need to be in working condition. In this case, if the engineer, maintenance person or technician leaves the machine, the machine must be shut down.**

DURING SCRAPING

All parts of the machine are made from recyclable materials. Thus, all parts can be reused as raw materials. No materials that could harm human health were used in the production of the machine. When the machine has completed its service life, it can be separated down to the smallest component and safely sent to the relevant recycling facilities.

Follow the instructions below when scraping:

- The cutting and piercing tools to be used while the machine is being separated into its components comply with the occupational safety rules. should be used.
- Precautions for personnel, limb entrapment situations during disassembly should receive.
- Removed and cut sharp-edged parts are positioned so as not to cause work accidents. should be stored.
- The oil that will come out of the machine components that contain mineral oil, such as the gearbox, should be collected in a closed container so as not to harm human and environmental health and sent to the recycling facility.
- Scrapped parts should be classified according to their types (iron, copper, aluminum, plastic, etc.) and sent to recycling facilities.
- None of the parts that make up the machine are radioactive. Therefore, scrapped machine parts do not need to be stored in a special area. there is none.

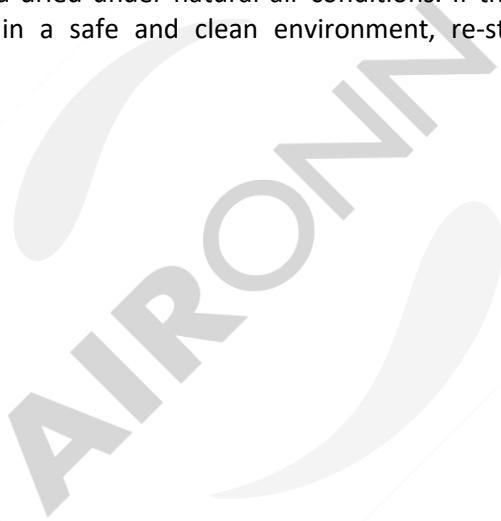
STORAGE OF THE PRODUCT

Follow the instructions below when storing the product after receipt.

- Make sure that the product is protected against all weather conditions by covering it with a tarpaulin. should be.
- The product should be stored in a closed area without being unpacked until it is time for assembly. should be done.
- General rules must be followed when transporting the product from the storage area to the assembly site.
- Care should be taken that the products transported to the construction site or assembly area are not exposed to weather conditions during storage, and that there is no excessive dust and dirt in the environment. should be done.
- Products should not be stacked on top of each other. Products should not be stepped on or weight should not be placed.
- Panel, profile, etc. that may damage the product. materials should not rest on the product.
- The product is suitable for places with heavy pedestrian/vehicle traffic. should not be placed.
- In the construction site storage area, the product is placed on the wedge. should be placed.
- Until the moment of assembly, the product should be stored on the pallets shipped.

General warning;

The product is shipped from our factory either wrapped in stretch film on a pallet or in a box. If water enters between the stretch film on the product delivered to the customer or stored in the assembly area, the product faces the risk of corrosion. Since the water between the product and the stretch film will have a corrosive effect on the product with the effect of the sun, the stretch film should be removed quickly, the product should be dried under natural weather conditions and stretched again. In case the box gets wet; The product should be taken out of the box immediately and dried under natural air conditions. If the dried product can be stored in a safe and clean environment, re-stretching is not required.



ASSEMBLY INSTRUCTIONS

Pay attention to the following instructions during the assembly of the products;

- ***Check whether the weight and dimensions of the fan comply with the base on which it will be mounted. should be done.***
- ***The on-site assembly of the fan and bringing it to its balance must be carried out by qualified personnel only. Incorrect mounting or fan base may cause malfunctions. In these cases, the products are not commissioned by Aironn authorized personnel and the products are excluded from the warranty.***
- ***The automatic control elements mounted on the device should be mounted using suitable materials so that no air leaks from the body. The control elements are mounted in a position that will not damage the mechanical operation of the device. should be done.***

AXIAL ROOF TYPE FAN MOUNTING

- A hole should be drilled in the roof where the fan will be connected, as much as the fan body will fit.
- A construction in which the fan will be placed in the opened hole. must be mounted.
- Careful attention should be paid to the preparation of the foundation on which the fan will sit and the mounting of the fan. Wrong and sloppy installation will negatively affect the performance of the fan, as well as cause fan failures. It is possible.
- The fan base should be heavy enough to dampen vibrations and strong enough to prevent bending and misalignment. Before the installation of the fan, the concrete base has completely solidified and gained resistance (completed its setting time). should be.
- After the fan is placed on the pedestal, it is measured vertically along the shaft axis with a spirit level. should be placed.
- Make sure the place to be installed is clean. There should be absolutely no foreign objects that the propeller can attract during operation.

- Assembly; should be made using bolts, nuts and washers. Vibration pads must be properly connected between the connecting feet of the device and the surface to be mounted. The weight of the device must be mounted on the vibration wedge in such a way that it exerts force in the compression direction in any case.
- Sufficient space to move around the installed fan and to service the fan, and enough space to lift the fan and its accessories when necessary. should be left.
- Install the fan in accordance with the airflow direction label. should be done.
- After the fan is placed and mechanically assembled, it is filled with materials that provide watertightness and impermeability. should be supported.

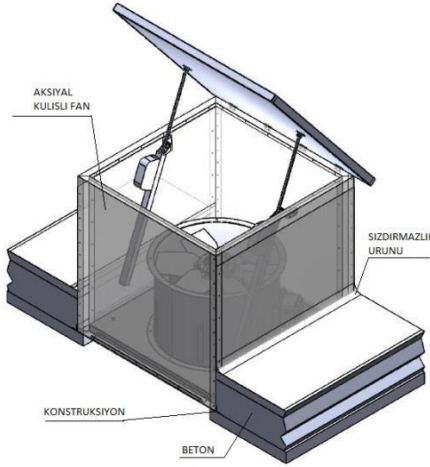


Figure – 5: Axial Lobby Type Roof Fresh Air Fan Connection Type

ELECTRICAL CONNECTION INSTRUCTIONS

- Before electrical wiring is connected, the existing electricity is directly from the source. should be cut.
- When mounting the apparatus, make sure that the mounting elements have the capacity to carry the weight of the product and that all connections are made correctly. should be.
- Data cables should not be laid in the same channel as energy-carrying cables. Because energy cables negatively affect the data transmitted through data cables. effects.
- All cables must be systematically addressed and labeled with a durable material.
- Cables should be in one piece from the feeding point to the receiver and no splices should be made.
- Mechanical assembly of the panel modules and their assembly on a carrier base to be prepared on the ground. should be done.
- All kinds of supply, power, control and measurement cables that have come to the panel and the bridge cables between the panel modules and the end connections of the panel are reliably and tightly should be done.
- Entry and end connections of fan motor cables into motor terminal boxes are made using flexible cable end connections, cable ferrule and cable lug. should be done.
- Motor terminal box covers should be closed, screws and union nuts should be sufficiently must be compressed.
- Before connecting the apparatus, check that the main power supply is turned off, even if the product is not working. should be done.
- The electrical connection information (frequency, voltage, power, etc.) specified on the product must match the electrical connection information at the place of installation.
- For safety, make sure that the grounding terminal on the terminal is connected to the building ground line. should be.
- It should be checked that the overload relay and the motor thermal are properly connected.

- In case of a possible problem, if the thermal circuit opens (when the product does not work), the system is reset from the mains and reactivated. should be taken.
- Product wiring, as in the electrical wiring diagram should be.
- With a switch with contact separation in all poles, to fixed installation in accordance with the installation rules. must be connected.

*****Users are obliged to carefully read the user and maintenance manual before using the fans.***

When you run your product for the first time;

- After disconnecting the electricity from the source, make sure that the electrical connections of the product are made safely and correctly. Please be.
- Carefully check that the safety equipment is properly connected. Please pay.
- Make sure the grounding connections are made correctly. Please be.
- Correct, safe and watertight sealing of the electrical junction box and cable. please provide.
- Check that there is no obstruction in the airflow path and that the air outlet direction is in the direction indicated by the label on the body. Please pay.
- Make sure the blades are turning in the right direction. Please be.
- While the product is running, make sure that there is no knocking or rubbing sound or vibration caused by the rotation of the fan or the aspirator. Please be.
- Electric source current and frequency values must comply with the product label.
- In the event of a possible electrical safety device being burned, immediately disconnect the power supply from the mains. Carefully check the entire installation again before operating the product. Please pay.
- If you encounter any problems, contact authorized persons. go ahead.

*****When the product is started to be used continuously, the type of malfunction should be determined in case of a possible malfunction. In order to repair the fault, the technical service unit must be contacted.***

*****It should definitely not be interfered with by people other than the technical service.***

Way of Giving	Motor power	
	PN ≤ 3 kW	PN > 3 kW
	3 ~ 400V	3 ~ 400V
Direct Connection	Y - Connection (15b)	Δ - Connection (15a)
Y / Δ - Connection	Impossible	Remove bridges (15c)

Table 1: Electrical connection table according to engine power

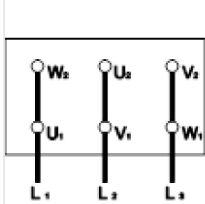


Figure 7: Δ Connection

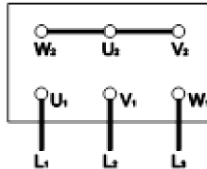


Figure 8: Y Connection

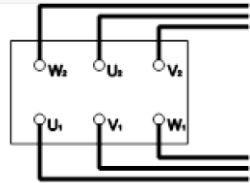


Figure 9: Y/Δ Connection

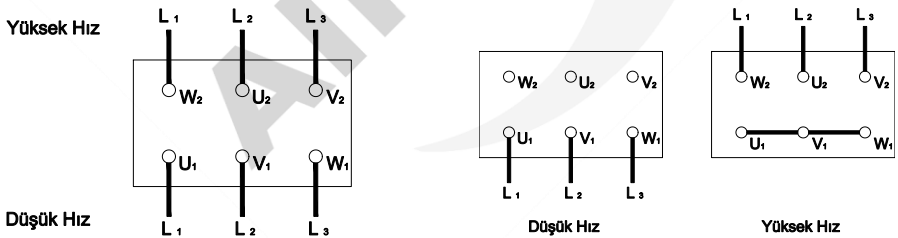


Figure 10: Terminal Connection for Double Speed Dahlander Wound Motor

On Off Motor



Open Switch



Closed Switch



24V



0V



24 DCV
Open
Feedback



24 DCV
Closed
Feedback

ELECTRICAL CONNECTION DIAGRAM

USE OF THE PRODUCT

Axial backplane roof type fresh air fans have easy-to-use features. These usage features vary according to the wishes of the users. These;

- 1- Manual use
- 2- with automation use

1-MANUAL USE

With manual use, it is possible to use the product by operating from a switch or fuse. Depending on the product model, it can be used easily and safely with 0-1 switch logic by connecting a paco switch or fuse between the electrical energy and the junction box connection on the product.

2- WITH AUTOMATION USE

It is possible to control the product with a PLC. This application varies according to the project where the user will use the product. By using sensors, using timer, using wireless module, using internet of things method, etc. methods can use the product efficiently. If this application is preferred, it is recommended to add the "Manual use" method externally, as it will be needed during maintenance.

MAINTENANCE INFORMATION

PERIODIC MAINTENANCE

Simple anomalies may require simple maintenance interventions while the machine is starting to separate. Although these interventions are simple, they can be done by the operator. More complex interventions should be performed by trained caregivers. Other complex interventions are carried out by the manufacturer's technical service. should be done.

According to the working year and the working environment of the machine, detailed visual and functional checks should be made by a specialist technician at least twice a year and the remaining life of the machine should be seen. The operator can take notes at regular intervals to determine the basic parameters of the machine properly. However, the maintenance technician will tell the operator about the general service: should ask:

- When function abnormalities increase shows.
- Whenever there is a structural or mechanical failure during maintenance.
- When will the machine reach its theoretical usage limit (or 10 years have passed since the first installation? me?).

All maintenance, warning anomalies or breakdowns require a long period of use between the operator and the machine. This is an untradable feature of maintenance that expresses risks by model and machine build. it does.

Traditionally, maintenance operators are more trained and skilled than other operators. Ultimately, of all installations and procedures, the most important person is security.

The following section contains the points that need attention during ordinary maintenance. receives;

- Before starting maintenance; signs about maintenance, warning and electrical connection ban should be placed.
- Before maintenance or cleaning, even if the product is turned off, it should be checked that the electrical connection is disconnected from the main electricity supply.
- Maintenance while mechanical organs are in motion should not be done.
- All electrical equipment should be checked regularly, connections should be inspected, and damaged or worn wiring and equipment should be replaced.
- In order to prevent pollution or deposits on the blades and the engine, its maintenance should be done by considering the operating conditions of the product. Otherwise, it may shorten the working life of the product or cause danger.
- While cleaning the product, care should be taken not to disturb the balance in the blade and turbine.
- Check the tightness of bolts that may loosen during maintenance. should be done.
- Unsuitable parts immediately should be replaced.
- While cleaning the product, flammable and combustible cleaners should not be used, it should be cleaned by wiping with a damp cloth. should be done.
- The product must never come into direct contact with water or pressurized water. should not.

*****AIRONN company does not take responsibility for malfunctions and personnel safety caused by a reason contrary to this booklet.***

*****Electrical maintenance of the machine must be carried out regularly by trained specialist personnel on a daily, weekly, monthly and semi-annual basis.***

POSSIBLE FAULTS AND THEIR REMEDIES

MECHANICAL FAULTS

ARIZA	NEDEN	ÇÖZÜM
Civata ve somun gevşemeleri	Vibrasyona maruz kalmak	Civata ve somunların torkla sıkılması kendinden flanşlı civata, somun ve vibrasyon takozu kullanılması
Vibrasyon takoz kafalarının kopması, sabitlenmediyse makinanın yerinden oynaması.	Vibrasyon takozları iki yıl garanti altındadır. Kötü koşullar altında çalışıyorsa, yaklaşık 3-4 yıl sonra kopabilir	Vibrasyon takozu kafalarının değiştirilmesi
Tel kafesin fana sürtmesi	Kalas vurmaya gibi dış etkenlere maruz kalması	Tel kafesin değiştirilmesi
Fanın fan gövdesine sürtmesi	Cihazın üst veya yan yüzeylerden kuvvet uygulanması sonucu gövdenin yamulması	Dış etkenlerin ortadan kaldırılması, Fan palalarının kısaltılması (tornalanması), Fana sıkışan malzemenin çıkarılması (çivi parçası, eldiven, kask gibi)
Servis kapağının çıkarıldıktan sonra tekrar yerine takılmaması	Cihazın rutubete, suya maruz kalması	Servis kapağının kapatılması
Motor bağlantı vidasının gevşemesi, kopması veya kırılması gibi parçaların arızalanması, fanın kopması	Darbe sonucu fanın balansının bozulması	Fanın balansının yapılması, Eğer motor bağlantı vidası gevşediyse, sıkılmalıdır. Eğer motor bağlantı vidası kırıldıysa değiştirilmelidir. Eğer fan zarar gördüyse, fan palası veya fan değiştirilmelidir.
Sürtünme, sıkışma, deformasyon sonucu fanın balansının bozulması. Eğer fan yüksek hızda çalışıyorsa, fan yamulabilir, pervane kırılabilir veya motor yanabilir.	Fan koruma kapağının çıkması	Fanın ve bütün mekanik parçalarının düzenli olarak kontrol ve bakımının yapılması
Fanın sürtünmesi, kırılması ve balansının bozulması, motorunun yanması. Eğer termal röle kapanmazsa, motor sargıları zarar görebilir. Bağlantının kopması ve vidanın fana sıkışması sonucu motor kaidesi kayabilir.	Motor ayaklarının gevşemesi ve yer değiştirmesi, aşırı balans.	Vidaları sıkma veya değiştirme, Civataların sıkılması veya değiştirilmesi
Buat kutusunun yerinden çıkması ve sallanması	Zorlama gibi dış etkenler, titreşim nedeniyle yerinden çıkması	Fanların ve diğer mekanik bileşenlerinin düzenli kontrolü

Table – 2: Possible mechanical failures and their elimination

ELECTRICAL FAULTS

ARIZA	NEDEN	ÇÖZÜM
Voltaj arızası	Düzensiz elektrik, istenilen düzeyde genlik sağlanamaması. Motor elektrik klemens bağlantılarında gevşeme, pano ve panodan sonraki hatlarda düzensizlik	İşletme görevlisinin enerji nakil hattını regüle etmesi veya faz dağılımını eşit dağıtması
Motorun devreye girmemesi	Yıldız veya üçgen bağlantılarının olmaması	Yıldız üçgen bağlantılarının yapılması
Motor klemens bağlantı papuçlarının gevşemesi, yer değiştirmesi ve kopması	Kablonun dışarıdan etkiyen mekanik strese maruz kalması, Civataların gevşemesi nedeniyle korozyona maruz kalması, Kaliteli olmayan malzeme kullanılması	Kontrol ve bağlantı yapılmalıdır.
Klemens bağlantı vidalarının kırılması sonucu kısa devre	Kablonun montaj sırasında dışarıdan etkiyen mekanik strese maruz kalması veya aşırı sıkılması	Klemens bağlantı vidalarının değiştirilmesi
Kısa devre	Motor ve buat kutusu arası kabloların ters veya gevşek bağlanmış olması, Motorun delta bağlantı ucunun dış buat kutusuna bağlantısının kopması	Fanların kontrol ve bakımı
Akım-gerilim ilişkisinde, devredeki termik rölede arıza	Dışarıdaki aşırı sıcaklık nedeniyle düzensiz nominal akım	Kabloları akım ölçerle kontrol etme
Motor sarğılarındaki aşırı ısınma sonucu motorun devreden çıkması	Kablo uçlarındaki korozyon nedeniyle oluşan düşük voltaj	Rulmanların değiştirilmesi, zararlı dış etkilerin ortadan kaldırılması
Motorun arka kapak soğutma fanının plastik kanatlarının çatlaması ve kırılması	Korozyon, darbeye maruz kalması	Fan kanatlarının değiştirilmesi
Kablo yanması	Rakorların gevşemesi ve içine sıvı alması	Rakorların sıkılması veya yenilenmesi
Bakım sırasında yeniden yapılan topraklamada gövdeye elektrik kaçması	Yetersiz topraklama	Topraklamanın bağlı ve işlevsel olup olmadığının kontrol edilmesi
Motor sarğısının yanması	Aşırı akım	Motoru değiştirme
Motor yanması, motordan ses gelmesi	Düzensiz akım, düzensiz faz, faz sırasının değişmesi	Motorun kontrolü, işletmeye bildirilip, akım veya fazın düzeltilmesi
Servis kapağındaki kontrol anahtarının açılması nedeniyle motorun devreye girmemesi. (Kontrol anahtarı varsa) Servis kapağındaki kontrol anahtarında arıza.	Korozyon, ark oluşumu, uç bağlantılarının kopması veya darbeye maruz kalma.	Servis kapağındaki anahtarın ve motorun çalışıp çalışmadığının kontrolü.

Table – 3: Possible electrical faults and their elimination

WARRANTY CERTIFICATE

MANUFACTURER OR IMPORTER COMPANY	
TITLE	AIRONN HAVALANDIRMA VE KLİMA SİSTEMLERİ SAN. DIŞ TİC. LTD. ŞTİ
ADDRESS	ÇAMLIK MAH. SENOL GÜNEŞ BULVARI NO: 28/A ÜMRANİYE/İSTANBUL
TEL / FAX	(0216) 594 5696 / (0216) 594 5717
SIGNATURE AND STAMP OF THE COMPANY AUTHORITY	
SELLER	
TITLE	
ADDRESS	
TEL / FAX	
INVOICE DATE and NO	
SIGNATURE AND STAMP OF THE COMPANY AUTHORITY	
PRODUCT	
TYPE	FAN
BRAND	AIRONN
MODEL	
BANDROL and SERIAL NO	
DELIVERY DATE and PLACE	
MAXIMUM REPAIR TIME	20 WORKING DAYS
WARRANTY PERIOD	2 YEARS
CUSTOMER'S	
NAME AND SURNAME	
ADDRESS	
PHONE	