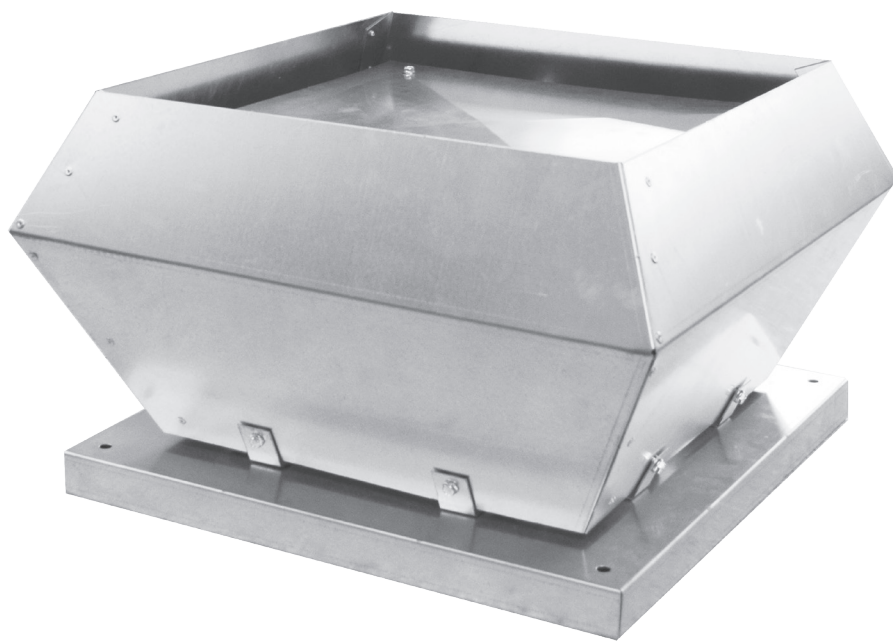


User's Manual Centrifugal Roof Fans



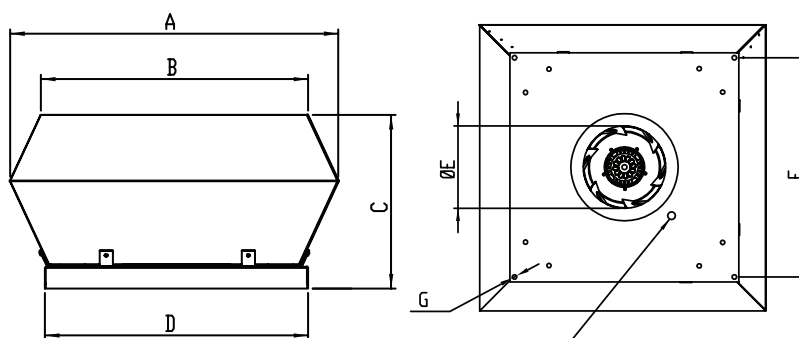
Models

DV-ROF-V-225
DV-ROF-V-315
DV-ROF-V-355
DV-ROF-V-400
DV-ROF-V-450
DV-ROF-V-500

Manual - Roof fans

DV-ROF-V**Safety warnings**

- These fans contain rotating parts and electrical connections. Therefore, pay attention to safety warnings during their assembly, maintenance and operation.
- Electrical connections and assembly must be made by authorized persons.
- Electrical connections of the fan should not be damaged when the ceiling or the wall is drilled or broken.
- The product must have an air duct of its own.
- During transport, operation and maintenance, hands should be protected with gloves against cuts.
- The fan should in no way be touched while operating.
- Proper cleaning should be done with periodic intervals; otherwise the product might be harmed.
- Keep the fan away from children and do not let unauthorized people to use it.
- Do not use do product at ambient temperature over 40 °C
- We herewith declare that our products do not contain asbestos, mercury, PCBs (polychlorinated biphenyls), deemed harmful to human or environmental health.

Dimensions

| Type | A | B | C | D | E | F | G |
|--------------|-----|-----|-----|-----|-----|-----|----|
| DV-ROF-V-225 | 350 | 295 | 190 | 335 | 146 | 245 | 10 |
| DV-ROF-V-315 | 552 | 450 | 330 | 505 | 185 | 450 | 10 |
| DV-ROF-V-355 | 745 | 607 | 385 | 595 | 234 | 450 | 10 |
| DV-ROF-V-400 | 745 | 607 | 385 | 595 | 270 | 450 | 10 |
| DV-ROF-V-450 | 900 | 742 | 512 | 665 | 282 | 630 | 10 |
| DV-ROF-V-500 | 900 | 742 | 512 | 665 | 320 | 630 | 12 |

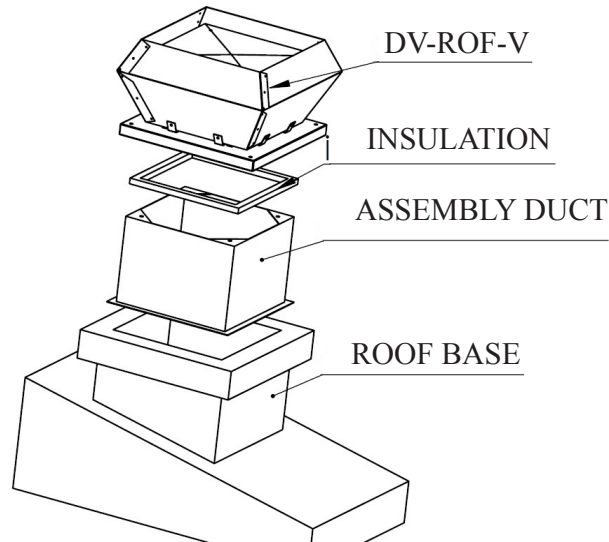
Technical Data

| Type | Voltage | Frequency | Power | Capacitor | Speed | Air Flow | Sound level | Weight |
|--------------|---------|-----------|-------|-----------|-------|----------|-------------|--------|
| | V | Hz | W | (uf) | d/d | m3/h | dB(A) | kg |
| DV-ROF-V-225 | 230 | 50 | 130 | 5 | 2640 | 850 | 40 | 7 |
| DV-ROF-V-315 | 230 | 50 | 180 | 4 | 1430 | 1550 | 54 | 22 |
| DV-ROF-V-355 | 230 | 50 | 220 | 6 | 1400 | 2400 | 56 | 34 |
| DV-ROF-V-400 | 230 | 50 | 360 | 12 | 1420 | 3500 | 59 | 39 |
| DV-ROF-V-450 | 230 | 50 | 620 | 18 | 1410 | 5000 | 60 | 51 |
| DV-ROF-V-500 | 380 | 50 | 950 | - | 1400 | 7550 | 62 | 60 |

Markings on the products or declared values on the other printed documents has been obtained in the laboratory in accordance with related standards. These values may vary depending on product usage and environmental conditions.

DV-ROF-V

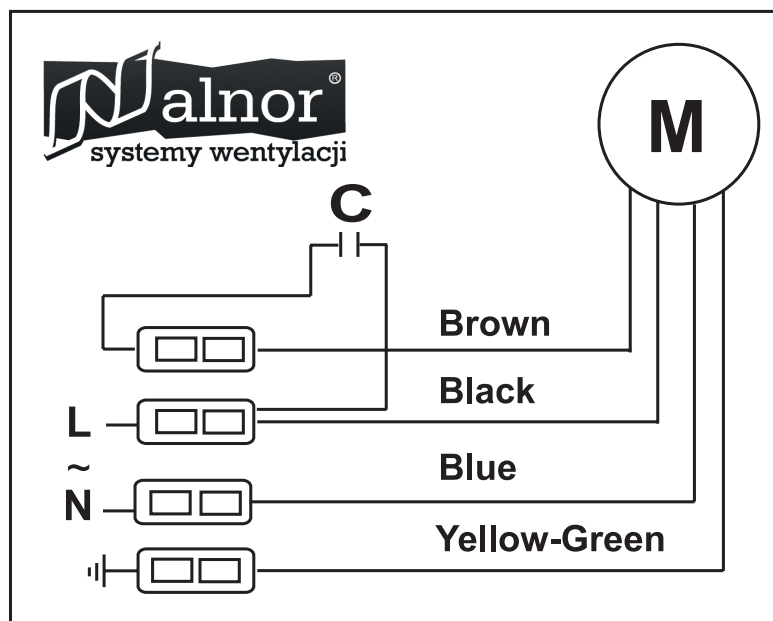
Assembly



1. For roof installation, use appropriate roof base in order to provide correct distance from a roof.
2. Use insulation material as shown in fig.
3. A fan connects to assembly duct, see fig.
4. Secure the fan against extreme weather conditions, with steel cables prevent it from falling.
5. Correctly connect the power cord, make sure to look at the wiring diagram. All poles of a circuit breaker mounted devices connect with the separator.
6. Be sure to install according to the direction of air flow.
7. Please try to run the fan after installation, check for vibration and errors.

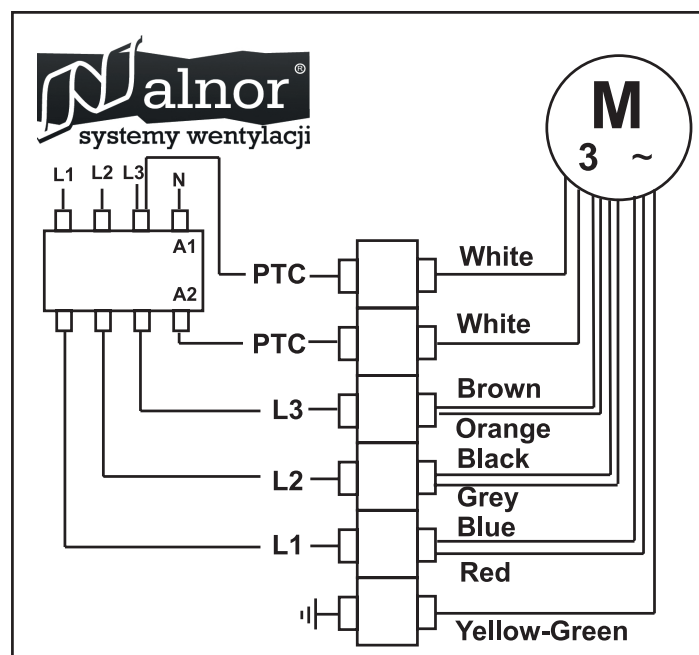
Wiring diagram

Single-phase connection



DV-ROF-V

Three-phase connection



- Products should be installed only by authorized persons.
- Installation of the product should be specified in the project, installation to the wall or floor must be securely mounted. If mounted on the wall, it should be mounted with bracket or with clamps.
- Fan blades must be installed at least 2,3 m above floor level, in case of wall installation.
- Fan can not be installed outside the window or wall.
- Necessary precautionary measures should be done to avoid back flow of gases into the chamber from outdoor gas pipe or other fuels device. Wearing gloves is recommended during the assembly process.
- The product must be connected to the input and output channels.
- Turn off the power before connecting electrical cords.
- When mounting brackets and mounts are installed correctly, make sure that they are solid enough to safely carry the weight of product.
- Even if main power supply to the product is switched off, You should make sure of that once more while connecting facilities.
- Before installation please check whether the electrical connection information (voltage, power, frequency, etc..) which is indicated on product label is matching with mounting area specification.
- There is no obstruction on the Air flow way.
- In terms of safety, ground terminal which is located in connection box should be connected to the building ground.
- Make sure that motor thermal and overload relay are connected properly.
- Product wiring, electrical connections must be as in the diagram.
- Contact separation in all poles along with a switch that must be connected to fixed wiring installations in accordance with the rules.

Usage

Roof Mounted Fans DV-ROF-V are perfect solution for ventilation needs where „polluted air exhaust“ is at a premium. DV-ROF-V roof fans are perfect for the places where air can not be ventilated horizontally. Roof fans DV-ROF-V are perfect for industrial and constructional applications, in factories, hospitals, offices, kitchens, bathrooms, theatres, restaurants, etc.

Users are obliged to read carefully the manual before attempting to assemble, operate or maintain fans.

Expected life of the products is 10 years.

When using your product for the first time;

- Before connecting electric cables, you must not forget to cut the power supply. Be sure that electrical connections of the product are established correctly and safely.
- Be sure that safety equipment is connected correctly.
- Properly establish earthing connections.
- Be sure that the cable and electric connection box are closed correctly and do not admit water leakage.
- Air exit direction should be in the direction indicated with the label on the body. There shall not be any obstacles in the air flow route.

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- The wings should rotate in the correct direction.
- While the product is operating, there shall not be any vibration or internal rubbing or hitting voice due to the rotation of the fan or the suction fan.
- Power supply, current and frequency values shall comply with the product label.
- If any electricity warning device turns on, electric connection should immediately be cut from the main power supply. Before starting the product, all the installation should be controlled again carefully.
- If any problem occurs, please consult authorized persons.

In case of any defect after you have started using the product continuously, the type of defect should be determined. In order to remove the defect, the technical service must be contacted. You must not try to fix the problem yourself.

Defects and How to Fix Them:

| <i>Abnormal Situation</i> | <i>Possible Cause</i> | <i>How to Fix</i> |
|-------------------------------|------------------------------------|-----------------------------------|
| Too much sound (noise) | Rotor imbalance | Change the rotor |
| The device is not working | Motor is damaged | Change the motor |
| | Condensator is not working | Change the condensator |
| | Faulty speed adjustment connection | Check the installation (assembly) |
| The device is rotating slowly | Faulty connection | Check the electrical connection |

Cleaning, maintenance and transport

In order to protect your product from being damage during transport;

The product has been packaged according to normal transport conditions. In order to avoid possible damage, it should always be carried in its original package.

- The product shall be kept in its own package in a vibration-free, dust-free environment away from abrasive or chemical material until it is delivered to its place of assembly. Do not accept the products which are not in their original package or which were opened before being delivered to you.
- The products should be stocked into the vehicle in a way to stay motionless in case of any turn over or fall down.
- While heavy products are being carried, use appropriate lifters to protect products or the people carrying the products.
- All necessary measures should be taken in order to prevent damages arising from sudden and careless lifting and putting down.
- The products should be carried one by one carefully. They shall not be thrown or carried carelessly from hand to hand.

After taking the product out of its package;

- The delivered product should be checked.
- The product must be checked for damage during transport. If there is any lost or damaged part, it should immediately be informed to the transporter or our firm verbally or by writing.
- Do not hold the product on its connection box or electric cables. Abstain from applications which will damage the wings or the protective cage while carrying.

Periodic cleaning and maintenance of the product;

- Before cleaning or maintenance, even if the product is turned off, be sure that electric connection has been cut from the main power supply.
- All electrical equipment should be regularly controlled, connections should be checked and damaged or worn-out cables and equipment should be replaced.
- Periodic maintenance should be carried out at least once every six months or more frequently, depending on its frequency of use. Maintenance and cleaning of the products should be carried out by qualified staff.
- Check the product regularly. In order to prevent dirt or accumulations in the wing, motor or grill, carry out the maintenance according to the operating conditions of the product. Otherwise, the expected life of your product can be substantially shortened or serious damage can occur.
- While cleaning the product, pay attention to protecting the balance on the wing and the turbine.
- Bolts which might become loose during maintenance should be checked.
- Inappropriate parts should be immediately replaced.
- The product should not be cleaned with inflammable or combustible cleaners; it should be cleaned with a wet cloth.
- The product should in no way be exposed to water or pressure water

Warranty and Service

Dear Customer,

We believe that providing good service is as important as providing good products for You, therefore we will appreciate any remarks concerning technical features and exploitation of our products.

We recommend You to use Your product according to the user's manual.

The warranty provided by ALNOR Systemy Wentylacji Sp. z o.o. does not cover the damages arising out of using the product under conditions other than its normal conditions of use. The following conditions are also not included in the warranty:

1. Damages and defects arising out of faulty usage,
2. Damages and defects which occur while loading, unloading or carrying the product after it has been delivered,
3. Damages and defects arising due to low or high voltage, faulty electrical installation and using the product at a different voltage than the one written on its label,
4. Damages and defects due to fire, earthquake, lightning strike, etc.
5. Damages occurring due to using the product under conditions not conforming to the issues stated in the user's manual.

The above-mentioned damages are fixed on payment.

In case the warranty service is unfounded, the customer will be responsible for any costs associated with non-warranty conditions.

Assembly and transport of the product is not included in the product price.

Warranty deed form is available for download from our website: www.ventilation-alnor.co.uk.

Since the invoice will be taken as reference if a misunderstanding occurs about the warranty period, the user must keep the invoice and a copy of it together with the Warranty Deed.

If the warranty deed is altered, the original serial number on the product is removed or altered; the warranty deed will become invalid.

Warranty terms and Conditions

1. The warranty period is 24 months from the date of sale.
2. The product including all its components is under the warranty of our company.
3. In case of defects with in the warranty period, the period spent in repairing is added to the warranty period. The repairing period is maximum 30 days. This period starts from the date of delivery of the product to the services centre or in case of absence of service centre to the seller, the agency there representative, the importer or the manufacturer of the product respectively. In case the defect is not repaired within 10 working days, the importer or the manufacturer is entitled to supply another product with similar features until the repair is completed. The warranty period of the replaced product is limited with the warranty period of the product which is purchased.
4. In case the product has material, workmanship and manufacturing defects during warranty period, the product will be repaired free of charge and expenses of any sort including labor, the value of the parts replaced or any our charges.
5. The consumer may request for replacement of product free of charge or price reductions in the rate of defects:
 - In case the product permanently dysfunctions due to repeating of the same defect for more than twice or more than twice or more than four different times within the warranty period
 - In case the maximum period for repairing is exceeded
 - In case it is determined by a written report that the defect cannot be removed by the seller, agency, representative, importer or manufacturer of the product respectively in case of absence of service centres.
6. The present warranty does not cover damages resulting from use of product against the instructions in the manual.
7. General Administration of Protection of Consumer Rights and Competition in the Ministry of Industry and Commerce may be applied for problems regarding the warranty certificate.