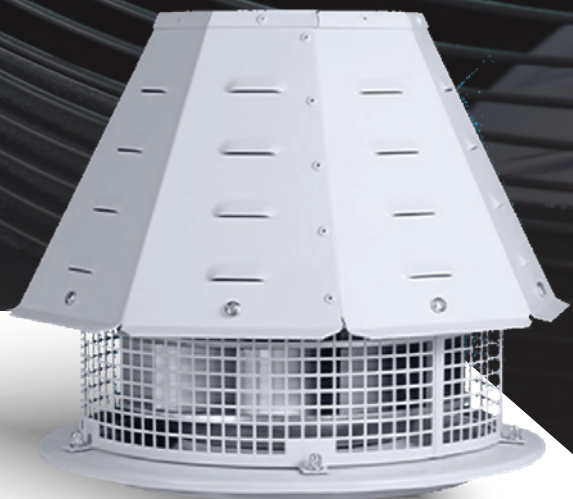
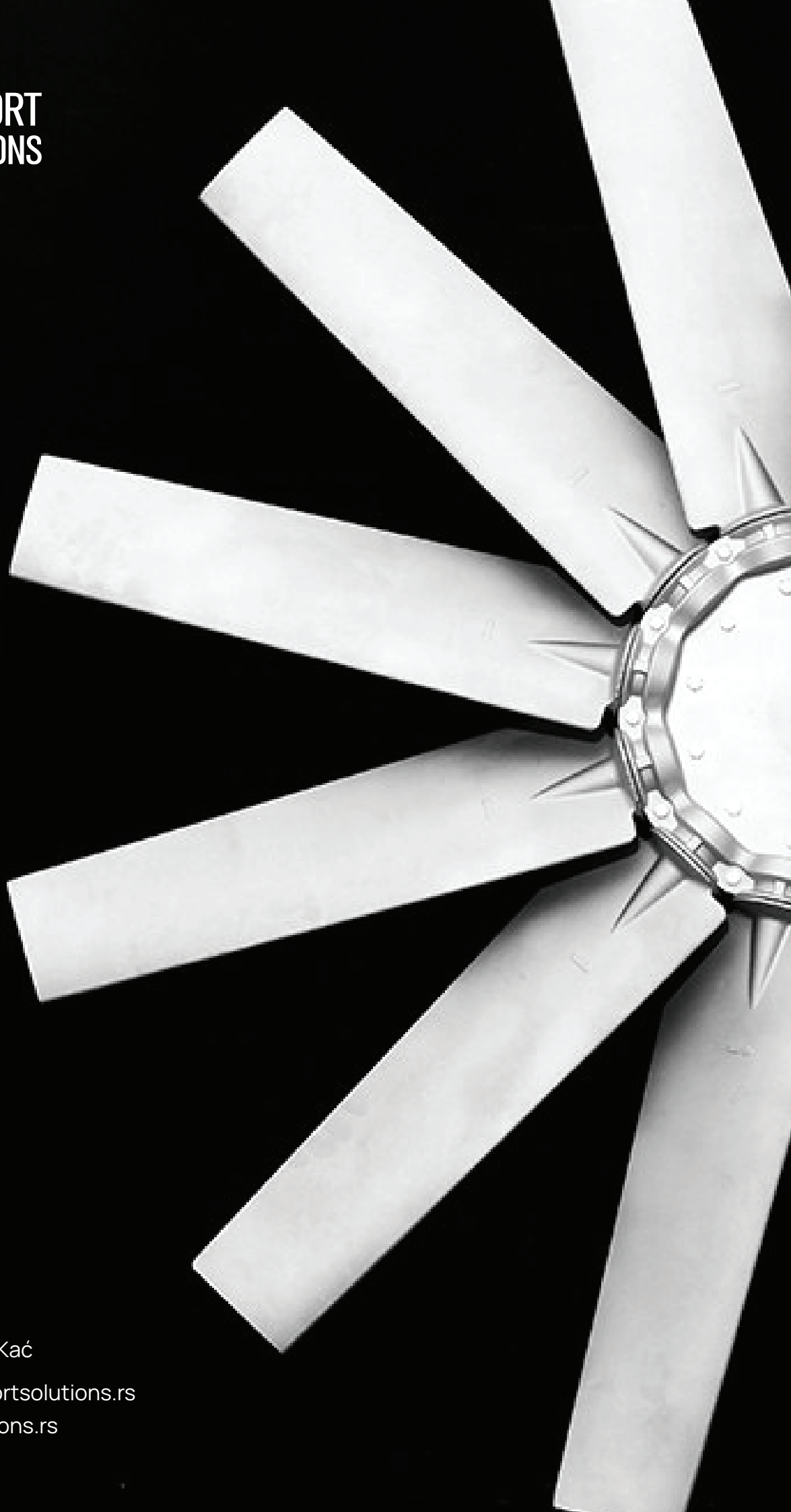


# INSTALLATION OPERATING MAINTENANCE MANUAL

## WARRANTY CERTIFICATE

**MODEL** HORIZONTAL  
DISCHARGE CENTRIFUGAL  
FAN WITH MOTOR OUT OF  
AIR





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## 1. INTRODUCTION

Before operating the KAYITES MÜHENDİSLİK branded MRAD Horizontal Discharge Centrifugal Fan With Motor Out Of Air please carefully review the user manual and keep it. Do not use the devices as a workbench or storage place. The MRAD Horizontal Discharge Centrifugal Fan With Motor Out Of Air can only be operated under for its design purposes and technical specifications.



READ THIS MANUAL BEFORE OPERATING AND KEEP IT WITHIN EASY REACH OF THE SERVICE PERSONNEL.

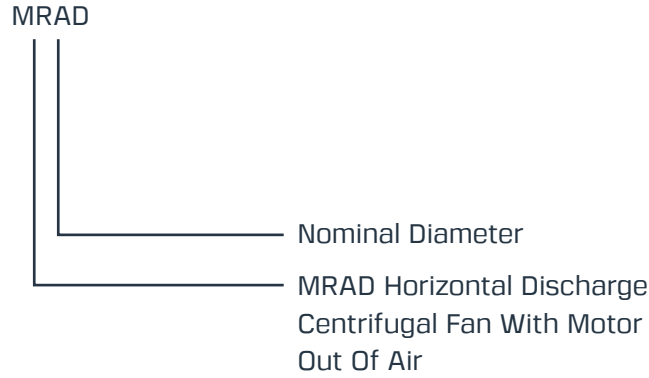
THIS DEVICE MAY ONLY BE OPERATED UNDER CONDITIONS SUITABLE FOR ITS DESIGN PURPOSES AND SPECIFICATIONS. OTHERWISE, THE RESPONSIBILITY BELONGS TO THE PERSON MAKING THE APPLICATION.

DO NOT USE THIS DEVICE IN EXPLOSIVE AND CORROSIVE ENVIRONMENTS.

RESPONSIBILITY FOR MALFUNCTIONS THAT MAY OCCUR AS A RESULT OF UNAUTHORIZED PERSONNEL'S INTERVENTION TO THE DEVICE OR THE USE OF NON-ORIGINAL SPARE PARTS BELONGS TO THE APPLICATION.

## 2. TECHNICAL INFORMATION AND FEATURES

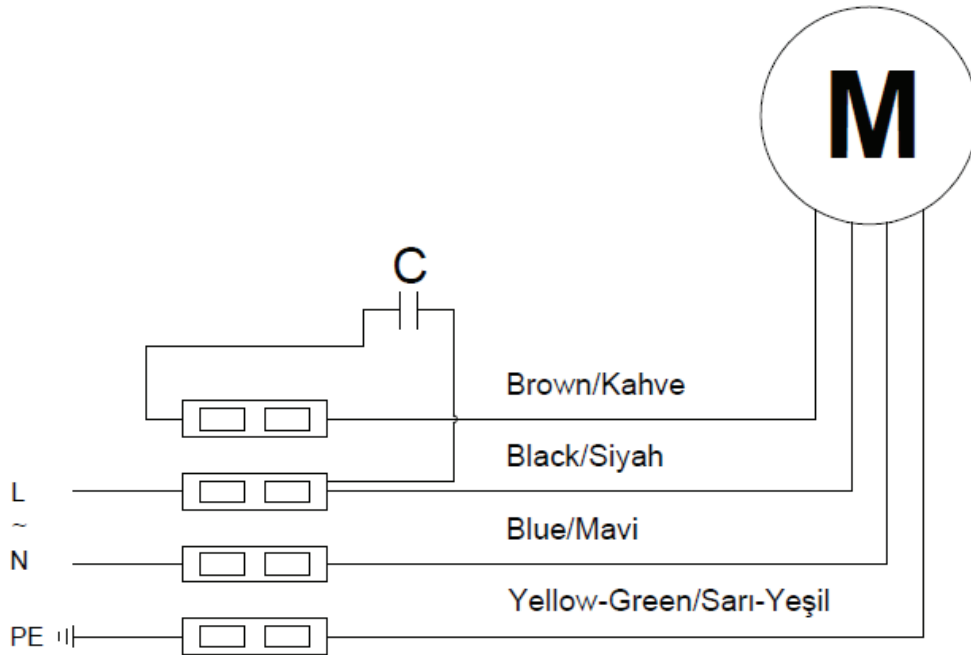
The physical characteristics to which the product codes of the fans correspond are stated below.



## 3. ASSEMBLY

Before starting the fan installation, check that the distance between the fan blades and the fan body is within the specified ranges. In addition, by manually rotating the fan, friction, installation and so on. should be checked. During the installation of the fan, no parts that may damage the fan should be left in the fan and foreign objects should be prevented from entering the fan. When assembling; safety precautions must be taken at the installation site and unauthorized persons should not enter the installation site.

The fan must be installed in such a way that it can be serviced easily. The ground connection must be made correctly. For electrical connection, it must be done by a qualified electrician using the connection diagram attached to the cover of the junction box.





THE DEVICE MUST BE GROUNDED.

NON-AUTHORIZED PERSONS IN THE AREA OF INSTALLATION MUST BE PREVENTED.

PROTECTIVE GLASSES SHOULD BE INSTALLED AT THE FIRST STARTING PROCESS FOR DUTY RISK IN EYES.

ALL FANS HAVE A CONNECTION BOX. SUITABLE FOR DEVICE CAPACITY; SOCKET, SOCKET INSURANCE AND CABLE CUTTING MUST BE SELECTED.

ALL ELECTRICAL CONNECTIONS MUST BE MADE IN ACCORDANCE WITH EN 60204-1 STANDARD. ELECTRICAL CONNECTIONS SHOULD BE MADE BY EXPERIENCED AND TRAINED ELECTRICAL TECHNICIANS.

## USER'S RESPONSIBILITIES

KAYITES can not be held responsible for any of the following except those included in this manual.

- Any use not permitted by law and norms
- Improper and unsuitable area and structure where the machine will be used
- Failure to comply or misuse of the issues specified in the booklet
- Use of electricity not suitable for the specified electrical installation
- Any modifications not made by authorized persons
- Use of the machine outside of its performance
- Lack of necessary maintenance
- Using trained personnel external machine
- Use of non-original spare parts not approved by the manufacturer.



ANY MODIFICATION ON THE MACHINE IS FORBIDDEN

Any damage that may arise from the use of the machine for any purpose other than its intended use is not the responsibility of KAYITES. The machine's operating capacity is limited by the channel dimensions on the label. KAYITES cannot be held responsible for any damages that may arise from the use of the machine over the specified capacity. The machine is not suitable for use in outdoor conditions (rain, snow, wind, etc.). Any responsibility that may arise from the use of the machine outdoors belongs to the user. The circular duct fans are designed only for the supply of fresh air and exhaust of polluted air. KAYITES accepts no responsibility for any negative situations that may occur if the machine is operated differently from its function.



The machine always complies with the necessary safety precautions if the instructions given in the operating instructions are followed. These instructions are used as a precaution against any safety risks that may arise from personnel operating the machine. The full capacity and efficient operation of the machine is ensured only if the instructions given in this manual are followed.

This booklet should be kept easily accessible as long as the machine is in use, and any changes or warnings made by the manufacturer should be indicated on the booklet. If the machine is sold to another user, the relevant manual must be submitted.

## GENERAL SAFETY INSTRUCTIONS

\*\* This section provides safety instructions that must be followed when transporting, installing, operating the machine, performing maintenance and scrapping.



HAND JAMMING HAZARD



ROTATING MACHINE WARNING



ATTENTION



ELECTRICITY ATTENTION



GROUND



DO NOT USE UNDER LOAD

## 4. COMMISSIONING AND OPERATION

Before commissioning, make sure that; Make sure that the device is positioned correctly, that the electrical connections are made correctly and that it operates at the right performance, that any debris and foreign objects generated during installation are removed from the mounting area and the duct where the fan is installed. Check the distance between the blades and the fan housing before switching on the fan. If this distance is correct, operate the fan briefly. Check that the direction of rotation of the fan matches the arrow on the housing. If the arrow and direction of rotation do not match, move the two phases and set the correct direction of rotation.

## 5. HANDLING

The fans are delivered in cardboard packages wrapped in plastic foils. The fans must be transported in the original packaging when transporting them to the installation site. During transport, care must be taken not to damage the connection cables, junction box, silencers and wire mesh. Care should be taken when loading and unloading to avoid possible damage.

## 6. MAINTENANCE

Check the bolt connections on the fan, the presence of dust on the fan blade, the function of the safety and control elements, the coil resistances and the operating current at least once a year. Make sure that all electrical connections to the fan have been disconnected and the fan has stopped before intervening. If necessary, original spare parts must be used for maintenance, otherwise the manufacturer accepts no liability. The fan should be cleaned when necessary or at least once a year. Use a vacuum cleaner or compressed air to clean the fan. Fan motor bearings do not require maintenance, they should only be replaced if necessary. The fan motor must not be in contact with water. Fan cleaning must be carried out without moving the blades and damaging them. Make sure that there is no sound from the fan after maintenance.

## 7. TROUBLE FINDING

It is necessary to turn off the fan before checking the fan and the system. During maintenance, the appliance must be completely disconnected from the power supply. All switches and breakers must be turned OFF and locked. In addition, the fan DO NOT OPERATE "mark should be placed on the control panel. Make sure that the fan blade is not obstructed by an object, if the problem is still not resolved, contact your fan supplier. If the fan is returned to the supplier, make sure that the fan is clean, that the connecting cable is undamaged and that there is an error report attached to the fan.

## 8. WARRANTY TERMS

- The warranty period starts from the date of delivery and is 2 years (24 months).
- All parts of the product are under warranty except the engine.
- In the event that the goods are found to be defective, the consumer shall have the right to take part in Article 11 of the Law No. 6502 on Consumer Protection;
  1. Return from the contract,
  2. Requesting a discount from the sales price,
  3. Request for free repair,
  4. Requesting that the sold person be replaced with a non-defective amount may use one of his rights.

**Out of Warranty:**

- Damage caused by transport after delivery to the consumer, external impacts. (damage and failures due to impact, breaking, scratching and chemical factors)
- Improper storage and ambient conditions made by after-sales customers
- Damage caused by high or low voltage or due to electrical installation.
- Incorrect capacity and model selection, incorrect installation.
- Problems caused by the absence of fuses in the electrical installation, the use of protection relays and thermal devices provided in the devices, or missing or incorrect connections, lack of grounding.
- Problems caused by external factors. (Disasters such as natural disasters, fire, flood etc.)
- Problems caused by inappropriate ambient conditions when using the device. (dust, water, dirt, moisture)
- Damage caused by forgotten foreign materials in the device and the fund engine.

In the event that a warranty condition is detected, the user shall notify Kayı tes Engineering or its authorized dealer with the original copy of the fully completed warranty document and the error or fault it has detected. If the assessment determined by Kayı tes Engineering or its authorized dealer is confirmed to be within the scope of warranty , repairs, replacement of parts or replacement of the product shall be made as determined by Kayı tes Engineering or its authorized dealer. The warranty for parts with spare parts status (parts replaced in your repaired product, out of warranty) is 6 months. The warranty of the replaced parts of the devices repaired during the warranty period is up to the remaining warranty period of the product.

<b>MANUFACTURER</b> Title: KAYI-TES MÜHENDİSLİK TAAH. İLET. ELEKT. VE DAYA. TÜK. MAL. SAN. TIC. LTD. ŞTİ. Address: F.ÇAKMAK MAH.ASLIM CAD.NO:42/C, KARATAY/KONYA Telephone: 0 (332) 345 36 76 Fax: 0 (332) 345 36 77 e-mail: bilgi@kayites.com.tr	<b>AUTHORIZED SIGNATURE:</b>  <b>AUTHORIZED COMPANY STAMP:</b>
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<b>DATE:</b>	<b>INVOICE NUMBER:</b>
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<b>PRODUCT BRAND AND MODEL INFORMATION</b> MRAD - Horizontal Discharge Centrifugal Fan With Motor Out Of Air MRAD315-230 V. Monophase	<b>NOTE:</b> Warranty Period: 2 years Maximum Repair Time: 30 working days
<b>SERIAL NUMBER:</b>	





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