



reventon
INDUSTRIAL SOLUTIONS

TECHNICAL DOCUMENTATION
DTR

Descratisation fan HC-3S



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1. INTRODUCTION

Thank you very much for purchasing Reventon Group's destratification fan. We would like to congratulate you on good choice.

1.1 PRECAUTIONS

The buyer and the user of the device should read carefully the following instructions and proceed to the content recommendations. Proceeding due to the following instruction guarantees the correct usage and safety. In case of any doubts please contact the producer. The producer reserves the rights to make changes to the technical documentation without previous notice. The producer is not responsible for the damages which occur due to improper installation, not keeping the device in repair or using the device out of line. The installation should be carried out by the professional installers, who possess the qualifications to install these types of devices. The installers are responsible for making the installation as instructed in the technical data. Regulations and safety rules must be followed. During the installation, use, service and periodical inspections all regulations and safety rules must be followed. In case of unserviceable please plug out the device and contact with the authorized person or the producer.

1.2 TRANSPORT

During the acceptance of goods it is needed to check the device in order to exclude any damages. During the transport it is needed to use the proper equipment, it is necessary to carry the device by two people. In case of any damages please fill in the damage report in presence of the supplier.

1.3 PACKAGE CONTENT

- Destratification fan
- Instruction and warranty card

1.4 USE AND PRINCIPLE OF OPERATION

In the heated high large-spaces the air mass is located in the upper part of room, which causes the heat loss. Destratification fans also called the drop fans or air mixers are used to save on heating. They steer the air back to work zone at the same time they level out the air temperature in the high room, they also limit the heat loss through the roof. They are used in production halls, warehouses and logistic centres.

2. SCHEMATIC DIAGRAM

2.1 CONSTRUCTION

- Casing
- Round 360° diffuser
- Axial fan
- Rotational holder

Casing: made of expanded polypropylene EPP, resistant, light and reliable. The material is capable of carrying considerable loads without deforming. It does not degrade under the influence of a lubricant, oil, crude oil and the majority of chemicals. It has an excellent sound insulation properties, that is why it is used as casings, material is environmentally friendly and "green", i.e. 100% recyclable. Aesthetic design gives new nature to the device.

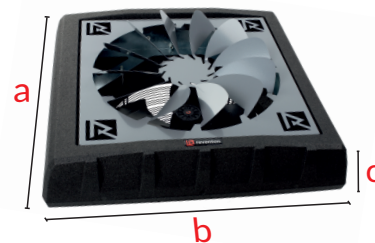
Round 360° diffuser: cover plate made of galvanized steel. Cover plate made of galvanized steel. It allows the even air flow in the room.

Axial blowing fan: protective grid made of galvanized steel, metal blades. The motor has got the safety degree IP 54. Rated current 1,08A. 1-phase device, 3-stage fan.

Rotating mounting bracket: made of steel, element for mounting the device on wall or ceiling. Solid and durable construction, possible to assemble device in parallel on the angle 60°. Possible rotation horizontally.

CASING HC

- a) height: 698 mm
- b) width: 739 mm
- c) depth: 340 mm



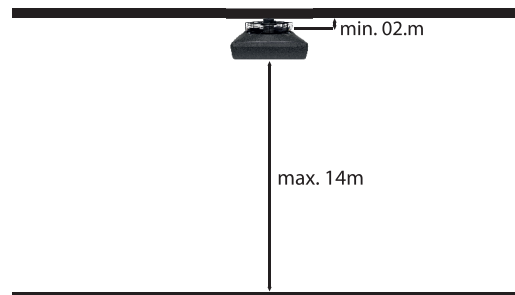
2.3 TECHNICAL DATA

Technical data	Unit of measure	Destratification fan HC
Maximum airflow	m³/h	5100
Maximum range of air stream	vertical	14
	horizontally	26
Rated current	A	1,08
Power supply voltage	V/Hz	230/50
Motor power	W	250
Motor speed	Rev./min	1350
Motor IP	-	54
Noise *	dB	III stage - 57 II stage - 52 I stage - 44

* The measurement at a distance of 5 m from the unit.

3. ASSEMBLY

Destratification fans can be assembled on the wall or ceiling via rotating mounting bracket. The drawings below show the ways of assembly. In the bigger accommodation it is recommended to assemble more than one device. Follow the parameters which are provided on the drawings.



Drawing 1. Assembly on the ceiling.

4. INSTALLATION INSTRUCTIONS

The installation should be made by the qualified staff, who possess the needed rights to install electrical devices, as instructed in the following documentation. The duct size for air water heaters Reventon Group HC-3S should be chosen by the designer.

5. PRECAUTIONS & WARNINGS

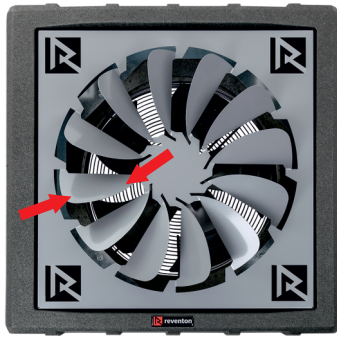
All works concerning electrical installation should be made by the qualified staff, who possess the qualifications due to the domestic and local norms. These recommendations include service and disassembly as well. Not following to the recommendations may cause electrocution, device damages or its incorrect work.

- Before service or exchange of the device it is obligatory to cut off the current supply.
- Do not cover the inlet and outlet of the device.
- Do not use the device in room with high moisture or close to the water basin.
- Do not install, service the device with wet hands or barefoot.
- Do not use the device in room with flammable fumes, gas and high concentration of dust.
- The device should be kept out of reach of children and animals.
- It is recommended to check the electric installation before the first start.
- It is recommended to use the external current differential protection.
- After operating time of the device, please utilize it concerning the local norms and regulations.

It is recommended to clean the device periodically:

- Fan casing and blades clean from the dirt.
- If the device is not used for a longer time disconnect the voltage supply.
- The device is transported with the closed air stators. It is essential to open them in 30 % before first start. Not keeping to the following recommendation may cause the damages of the fan.

Opening the air stators must be made by two hands in parallel. Not keeping to the following recommendation may cause the damages of the air stators.



6. CONTROLS

To make easier the usage of the Reventon Group devices we also offer the additional controls:

Fan speed controller - designed to change the single-phase fan's speed voltage controlled in industrial supply and heating systems

3-stage speed controllers with thermostat

Controller is used to regulate devices equipped with 3-stage fans. It has 3-stage speed control and thermostat built in.

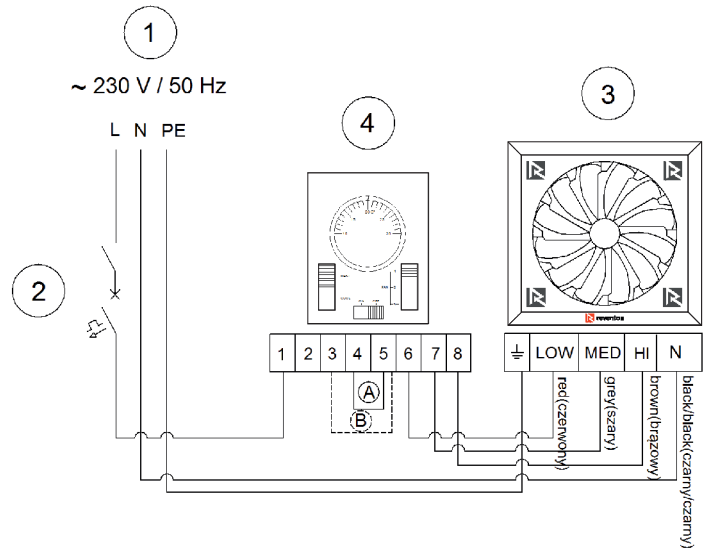
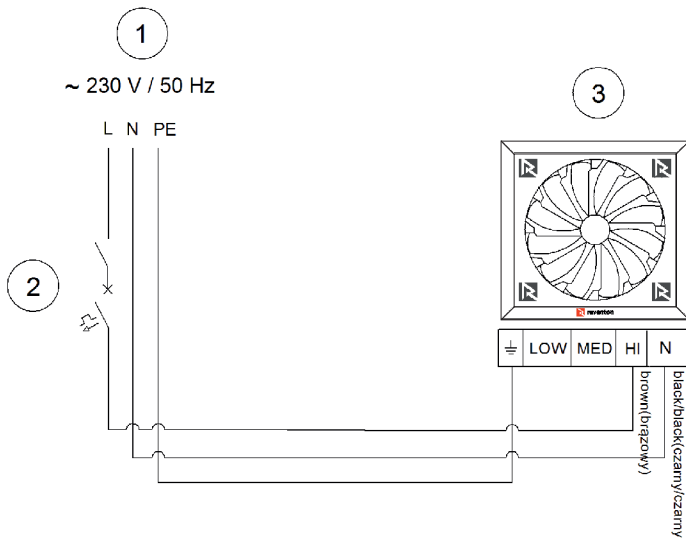
In addition, the unit controls the operation of the actuators installed on the control valve. Works in both heating and cooling modes.



Independent control switch system
3-stage fan adjustment
Electric valve and thermostat controlled fan
HEAT / COOL switch
ON / OFF switch
Temperature range: 10°C~30°C
Control accuracy: <1 °C
Dimensions: 130x85x40 mm
Voltage: 230V / 50-60Hz
Rated current: 3A
Degree of casing's protection: IP30
Weight: 0,21kg

7. CONNECTION SCHEMES

1. Power
 2. Main switch, overcurrent circuit breaker*
 3. Destratification fan HC-3S
 4. 3-step controller with room thermostat HC3S
- * main switch and safety fuses are not incuded in the set



8. TERMS OF WARRANTY

I. Reventon Group Sp. z o.o. [Ltd.] 3B Montazowa Street , 43-300 Bielsko-Biała, Poland, is the producer of the Reventon Group brand. The warranty concerns the following devices and it is valid for 2 years:

-destratification fan HC 5100 m3/h

II. Warranty is valid in the European Union.

III. The terms of warranty are valid from purchasing the device (the date issuing a document confirming the purchase of the device) but not further than 30 months from leaving the producer's warehouse.

IV. The defects revealed during the warranty period will be removed free of charge in 14 working days. The service will be done by the installation company due to the terms of included in warranty card. The elements will be supplied by the Reventon Group producer during the warranty period.

V. Warranty does not cover the parts of the device subject to normal maintenance and the cases as below:

a) Mechanical defects, damages from the impact of the improper transportation or damages through improper storage.

b) Defects through:

- improper usage and service;
- using the device in the improper conditions (too high humidity, too high or too low temperature, impact of the surrounding, sun etc.);
- modified equipment that has been modified or repaired without written agreement of the producer;
- connecting additional equipment, which is not recommended by the producer or inconsistent with the technical documentation;
- improper power supply.

c) Elements which wear and tear such as discolor or using.

VI. All changes in record in the warranty terms or any constructive modifications, independent service outside the Reventon Group service or use, uncaring, makes the warranty not valid.

VII. To obtain the service it is needed to send to the producer warranty card with the signature, document confirming the purchase, (copy of the invoice) and correctly filled the warranty form.

VIII. Not following to any of warranty regulations makes the warranty not valid.

IX. All correspondence, returns, complains should be send to the following address: Reventon Group Sp. z o.o. 3B Montazowa Street, 43-300 Bielsko-Biała, Poland or e-mail: serwis@reventongroup.eu

The producer reserves the rights to make changes to the technical documentation without previous notice.

Warranty card

Factory number of the device:	Address and place of assembly
Stamp and signature of the installation company:	

Warranty form

The company reporting the complaint:	Date of assembly:	Address and place of assembly the device:
The company installing the device:	Date and circumstances of noticing the defect:	
	Factory number of the device:	Date of declaration the complaint:
Description of the defect:		
Contact Name and Surname, telephone number/ e-mail address:		

Service card

Date of declaration the complaint:	Description of the repair:	Service stamp:
Date of repair:		