





TABLE OF CONTENTS

1. General information

2. Fan installation

3. Fan models

4. Electrical specifications and connection

5. Start-up

6. Use

7. Transport and storage

1. GENERAL INFORMATION

VCR fans are intended for mechanical exhaust ventilation in residential buildings, collective housing and public utility buildings.

Unlike standard fans, the working specifications of VCR fans are adapted for compatibility with HIGRO® systems.

HD automation

Integrated into the VCR fan, the HIGROdynamic automated system adapts the fan speed to the opening degree of the HIGRO® AERECO diffusers and grilles. This means that the electronic system lowers the fan speed at low flow volumes, adapting to the lower airflow resistance in the ducts, and increases the fan speed at higher airflow volumes caused by the open dampers of the hygroregulated grilles. The HIGROdynamic automated system prevents improper operation of the ventilation system, in particular excessive noise from grilles and diffusers at low humidity. The automated regulation of operating parameters reduces the fan's energy consumption.

ATTENTION!!!

The compact design minimises the necessary installation space on the roof. The fans, thanks to their flexible work and adaptation to the network parameters, can be used both in tall and short buildings.

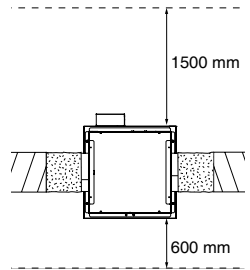
2. FAN INSTALLATION

The VCR fans are suitable for both indoor (horizontal and vertical installation) and outdoor use in variable weather conditions (horizontal installation).

- The fan installed outdoors should be equipped with an ejector protecting it from precipitation. The active surface of the ejector may not be smaller than the surface of the fan ejection opening.
- If it is necessary to reduce the noise level of the fan, it is recommended to use an acoustic ejector.
- To avoid vibrations and their transmission to the building structure, the following must be used:
 - anti-vibration mounts,
 - flexible connections between the fan and suction and discharge lines.
- The connected ventilation duct should be equipped with an acoustic silencer with properties specified in the installation design.
- Watch out for sharp edges and corners.
- Disconnect the fan from the mains supply before carrying out any installation or maintenance work.
- All works inside the fan casing and connected to the power supply and fan automated system must be carried out after the power supply has been disconnected. The installer is responsible for the compliance with all applicable safety regulations for electrical connections and protection against accidental contact.
- Clearance must be provided around the fan, the automated system and the measuring stub to allow for future maintenance.
- The automated control system must be located in an easily accessible place.
- During installation and storage of the automated equipment, it must be protected against the ingress of water.
- During all works connected with the fan service one should
 - use protective gloves,
 - use tools designed for maintenance work.

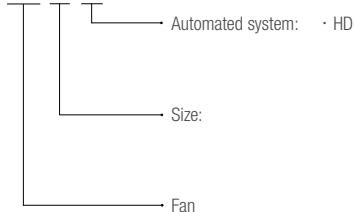
ATTENTION!!!

The fan must be protected from the atmospheric conditions during storage.



3. FAN MODELS

VCR-31-HD

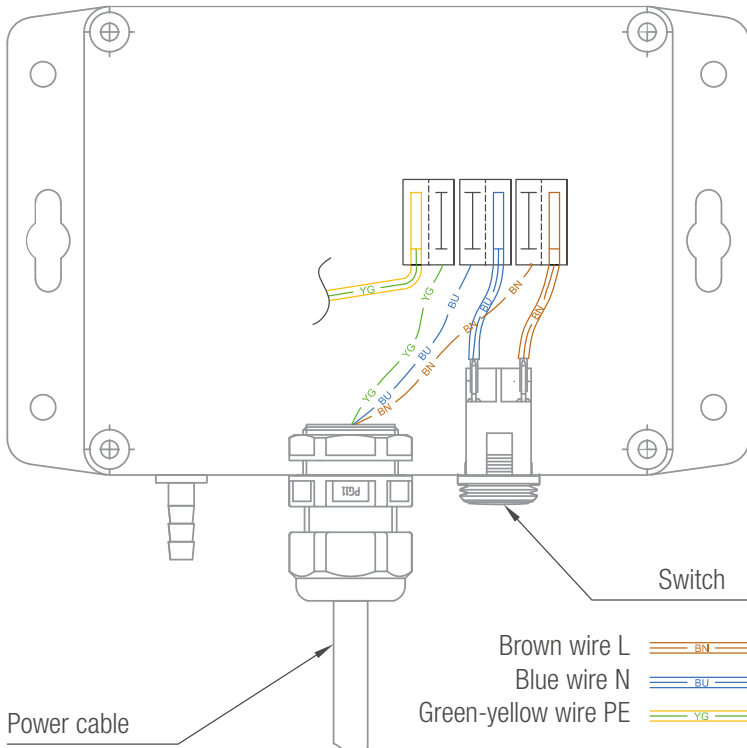


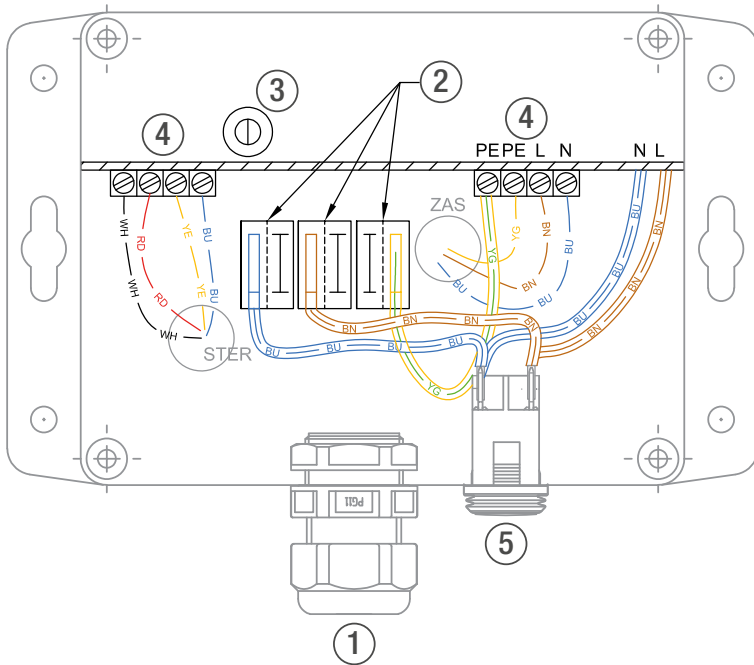
4. ELECTRICAL SPECIFICATIONS AND CONNECTIONS

Type	Power supply	I max. [A]	P max. [W]
VCR-31	230 V AC/50Hz	1.7	170
VCR-32	230 V AC/50Hz	1.7	170
VCR-33	230 V AC/50Hz	1,75	170
VCR-34	230 V AC/50Hz	2	400

Connecting the HD automated system

The power supply for the fan with a HD automated system should be connected as shown in the drawing.





To open the casing of a HD automated system use a screwdriver, do not use a power screwdriver because of the danger of damaging the screws.

1 PG11 cable gland enables connection of 1x230 V power supply. The power wires should be connected to the corresponding terminal blocks **2**, in accordance with point 4 of the technical and propulsion documentation.

The potentiometer **3** is used to change the setting of the base pressure. The base pressure is preset at the factory. Do not change the default connections **4**. The automated system is equipped with a switch **5**. The switch-off button is located on the lower surface.

After connecting the power supply, mount the cover of the automated system and tighten it with screws with 0.8Nm force.

5. START-UP

- Incorrect start-up can lead to permanent damage of the fan.
- The start-up can be carried out by the AERECO service with prior agreement.

Before applying voltage you have to check that:

- installation materials, possible waste and tools have been removed from inside the fan,
- the fan impeller turns easily without rubbing or jamming,
- the fan is securely mounted,
- the direction of air flow through the fan corresponds to the installation design,
- electrical connections have been made correctly,
- the wire fixing is secure and made using the correct materials,
- electric wires connected to the fan are properly fastened, without risk of breaking or fraying due to vibrations,
- the protective (earthing) conductor and possibly also the equipotential bonding conductor are correctly connected to the fan and to the grounding point (busbar)
- safety devices have been installed and they comply with the general safety regulations and the requirements of section 3 of the documentation,
- the voltage supply corresponds to the rated values within the tolerances: max. voltage + 6%, - 10% according to EN 60038:2012 (unless other tolerances are indicated on the nameplate of the fan).

After applying voltage you have to check that:

- the fan works without any abnormal sounds.

ATTENTION!!!

- *Start-up must be documented by an entry in the warranty card.*

- *Causing damage to the fan as a result of installation error or the use of inappropriate electrical protection is grounds for invalidating the guarantee.*

6. USE

The fans require periodical service twice a year which must include checking the general condition and cleaning the impeller and the housing. Before operation, service or repair of the device, it is necessary to make sure that

- the employee performing the inspection has been trained and knows the safety rules,
- the power supply is disconnected (circuits of all poles) and that it is not possible for third parties to switch on the fan,
- the fan impeller is no longer rotating.
- The fan bearings do not require lubrication and should be replaced if faulty.
- Do not use pressurised equipment (compressed air or pressurised water) to clean the fans.
- When cleaning, make sure that the weights balancing the impeller are in place and the impeller is not deformed.
- After cleaning, make sure that the fan works without any abnormal noises.
- Check that the impeller is not jammed and that the motor protection is not loosened.

ATTENTION!!!

- *Service notifications should be made via the website: www.serwis.aereco.pl*

- *Start-up must be documented by an entry in the warranty card.*

ATTENTION!!!

- *Failure to carry out the inspection will result in the loss of warranty.*

7. TRANSPORT AND STORAGE

Before installation, the products must be protected from direct exposure to water, dirt and atmospheric conditions. They should be stored in a dry place.

AERECO S.A. RESERVES THE RIGHT TO MAKE CHANGES TO THIS TECHNICAL MANUAL WITHOUT NOTICE.

**Declaration of conformity
no 20190312/VCR-31-34-HD/ErP**

1. Selling company:

Aereco S.A.

**62 rue de Lamirault – Collégien
77615 – Marne-la-Vallée Cedex 3
France**

2. Product name:

**Fans VCR-HD:
- 31; 32; 33; 34**

3. We declare the conformity of the product with the following directives, standards and documents:

Directive 2014/30/EU

Directive 2014/35/EU

Directive 2006/42/EC

European Commission Regulation 1253/2014

Łomna Las, 12/03/2019

Marcin Gasiński



Technical and Energy
Requirements Specialist



AERECO S.A.
62 rue de Lamirault - Collégien
77615 MARNE LA VALLEE CEDEX 3
FRANCE

www.aereco.com