
VDA



Users manual

J.E. StorkAir

For the user

The VDA is a vertically exhausting roof fan with an aluminium centrifugal vane and backward inclined blades.

The housing is manufactured from high-quality fibreglass reinforced polyester.

Use

The fan is intended for extracting (polluted) air, which is exhausted vertically. The VDA is not suitable for the supply of fresh air.

The fan is designed for continuous operation and must not be switched on and off at intervals of less than 5 minutes.

Guarantee

J.E. Stork ventilatoren B.V. provides a 1 year guarantee on the fan. The effective date of the guarantee period is the date of purchase.

The guarantee will be cancelled if:

- installation has not been carried out in accordance with the applicable regulations;
- any defects are the result of incorrect connection, incompetent use or contamination of the fan;
- modifications have been made to the wiring or repairs have been carried out by any unauthorised third party.

On site (dis)assembly costs are not covered by the guarantee. In the event of any defect arising during the guarantee period, please contact the installer.

For the installer

Transport and handling of the fan

The fan should be transported horizontally and may only be lifted by the lower casing (for VDA 200 to 560, see pos. 7, for VDA 160 and 180 see pos. 7), or by the base (VDA 200 to 560, see pos. 13).

Installation of the VDA roof fan

- The fan must be installed horizontally in order to prevent wind and rain from entering.
- A weather resistant seal of sufficient thickness should be fitted under the fan to ensure airtight installation.

- Using bolts and rings, ensure that the fan is mounted securely so that in the event of heavy winds it remains in situ.
- When mounting the fan on a silencer (type GDH or GDB) or roof mounting curb (type DOS), use must be made of the mounting bolts and rings supplied and fitted.
- Install the fan in such a manner that there is no risk of any person touching the side of the fan not fitted with a protective grille (see EN 294).

Electrical connection

- Connect the fan in accordance with the enclosed diagram, EN 60204 and the locally applicable regulations.
- The power supply cable can be fed from inside through a gland in the base or over the roof.
- The electrical connection is made on the external mains switch or terminal box (VDA 200 to 560), or under the motor protection cover (VDA 160 and 180).

Setting into operation

- Check the free rotation of the vane.
 - Check whether the electrical connections have been made in accordance with the supplied diagram.
 - The fan must be protected against overloading.
 - If motor protection is fitted, set to 5% above the current indicated on the VDA type plate.
 - Start the fan.
 - Check the direction of rotation of the vane (see arrow on fan). Incorrect rotation may result in the motor burning out.
 - Measure the current consumption of each phase. The measured current (on a nonvariable speed fan) must not be higher than stated on the type plate. The protection must be set to the highest current measured. On a variable speed fan, the current must be measured over the entire speed range. Set the protection to the highest current measured.
- N.B. Not all VDA roof fans are speed variable. Please check in the documentation.
- The permissible temperature of the air to be exhausted is -30°C to +40°C for the types VDA 160 and 180, and -30°C to +120°C

for the types VDA 200 to 560.

- The fan is designed for continuous operation and must not be switched on and off at intervals of less than 5 minutes.
- Do not use the mains switch as On/Off switch. This may damage the fan (at capacities > 2.0 kW).

Inspection/Maintenance

- Before carrying out any inspection/maintenance activities, isolate the fan from the mains; first turn off the operating switch, followed by the mains switch.
- To enable inspection, remove the upper casing(7) with protective grille(1).
- Loosen the nuts(5) and remove the outer assembly plates(6).
- Remove the upper casing(7) and the protective grille(1).
- The motor is fitted with ball-bearings with a grease filling, which under normal circumstances is sufficient for 30,000 hours of operation.
- Check that the vane, motor and base are not damaged or dirty.
- Clean the components if necessary. Avoid damaging of the protective coating.
- The fan may not be sprayed with water.
- Following assembly, switch on the fan; first the mains switch, followed by the operating switch.

VDA 200 to 560

Disassembly

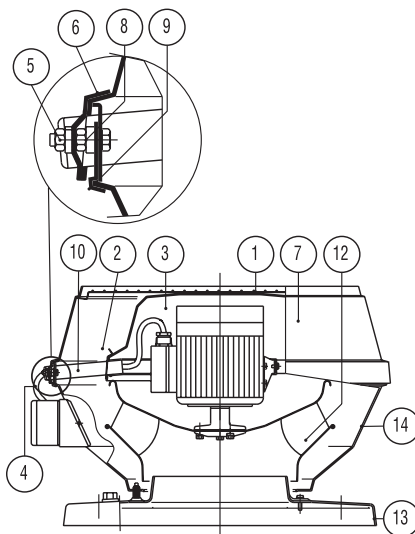
- Before starting disassembly of the motor, isolate the fan from the mains; first turn off the operating switch, followed by the mains switch.
- Disconnect the connection cable(4) between the motor and external terminal box or mains switch(possibly in the terminal box).
- Loosen the nuts(5) and remove the outer assembly plates(6).
- Remove the upper casing(7) and the protective grille(1).
- Remove the motor cover(3) by pulling it upwards and pushing the springs(2) outwards.

- Loosen the nuts(8) and remove the inner assembly plates(9).
- Remove the motor frame(10) with motor and vane from the fan.

Do not set aside with the vane on the ground!

- Assembly is performed in the reverse order.
- Check the free rotation of the vane.
- Check the rotating direction of the vane (see arrow on fan). Incorrect rotation may result in the motor burning out.
- Switch on the fan; first the mains switch, followed by the operating switch.

VDA 200 - 560



1a.

Vane disassembly

- Remove the catch plate from the vane.
- Remove the vane from the motor.
- Assembly is performed in the reverse order.
- If an alignment mark is present on the hub plate of the vane, ensure that this is aligned opposite the key way on the motor shaft as this is the position in which the vane was balanced.

VDA 160 and 180

Motor (dis)assembly

- Before starting disassembly of the motor, isolate the fan from the mains; first turn off the operating switch, followed by the mains switch.
- Loosen the screws(11) and remove the motor cover(3).
- Loosen the 4 screws(15) on the upper casing(7).
- Remove the upper casing.
- Disconnect the connecting cable.
- Loosen the four screws. The motor with vane and mounting frame can now be removed.
- Further disassembly is obvious.
- Assembly is performed in the reverse order.
- Switch on the fan; first the mains switch, followed by the operating switch.

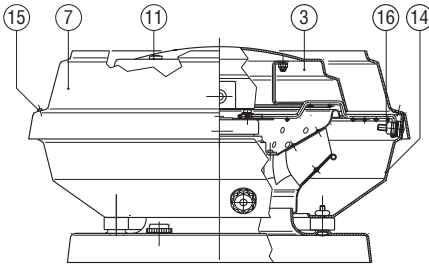
Failure

In case of any problems first check:

- the rotating direction of the vane;
- the protection;
- the voltage on the fan;
- the free rotation of the vane,

Before contacting the supplier. Make a note of the information on the fan type plate before contacting the supplier.

VDA 160-180



1b.

EC declaration of conformity

J.E. Stork Ventilatoren B.V., Postbox 621, 8000 AP Zwolle, The Netherlands
Tel.: +31 (0)38-4296911 Fax: +31 (0)38-4225694

Machine description : VDA

EC type examination : not applicable
- Number :
- Name of inspecting body :
- Address :

Complies with directives : - Machinery Directive (98/37/EG)
- Low voltage directive (73/23/EEG)
- EMC directive (89/336/EEG, 92/31/EEG en 93/68/EEG)

Complies with harmonised standards : - EN 292-1 (1992) "Safety of machinery"
- EN 292-2 (1992) "Safety of machinery"
- EN 414 (1994) "Safety of machinery"
- EN 60034-5 (1988) "Degrees of protection"
- EN 60335-1 (1993) "Safety of domestic and similar appliances"

Complies with national standards :

Complies with international standards :

Zwolle, 30 juni 1999



P.S.W. Jansen
Managing Director

The right to make changes is reserved. In case of disputes the Dutch version of these instructions will be binding.

J.E. StorkAir

J.E. Stork Ventilatoren B.V.

Postbus 621, 8000 AP Zwolle

Nederland

Helpdesk: 0900-555 19 37

Internet: www.jestorkair.nl

E-mail: helpdesk@jestorkair.nl

J.E. Stork Ventilatoren NV/SA

Vriesenrot 26, Industriepark Hoogveld

9200 Dendermonde

België

Telefoon: +32 (0)52-25 87 80

Telefax: +32 (0)52-25 87 98

Internet: www.ventilatie.com

E-mail: info@ventilatie.com