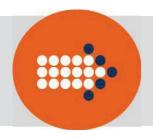
#### www.heylo.de

Stand: 06/2016 Art.-Nr. 1 110 814







# **PV 3000 VENTILATOR**

# **BEDIENUNGSANLEITUNG**

**USER MANUAL** 

DE Ventilator

▶ EN Ventilator

# **EC** Declaration of Conformity, IIA In conformity with EC Machine Directive 2006 / 42 / EC, Amendment of the Directive 95 / 16 / EC (new version)

For unit series: Ventilators / PowerVent PV 3000, PV 4000-e Type:

HEYLO GmbH of Im Finigen 9, D-28832 Achim, Germany, declares that, if they are fitted, maintained and used in conformity with the operating instructions and the generally accepted engineering standards, the machines mentioned are in keeping with the fundamental safety and health requirements. In case of unauthorised changes of the machine, the directives shall forfeit their validity.

Applicable EC directives:

EC Machinery Directive 2006 / 42 / EG 2006 / 95 / EG Low Voltage Directive **EMC Directive** 2004 / 108 / EG **RoHS Directive** 2011 / 65 / EG

Applied harmonised standards:

EN ISO 12100-1:2003-06-09 Safety of machines - basic concepts, general principles for design

Part (1): Basic terminology and methodology

DIN EN 12100-1:11:2003 Safety of Machines - fundamental notions,

DIN EN 12100-2:11:2003 general principles for design;

Part (2): Technical principles and specifications

DIN EN 60204-1:06:2007 Safety of machines and electric equipment in machines

(VDE 0113-1)

DIN EN 50081-2:03:1994 Electro-Mechanical Compatibility, generic standards

Emission Standards for Industrial Environments (VDE 0839-81)

Applied national standards as well as technical specifications:

**BS EN ISO 12100** Safety of machines, risk assessment EN 61000-6-3 Electromagnetic compatibility

EN 61000-6-2 Electromagnetic compatibility

The devices are type-tested in conformity with German standard DIN VDE 0700, part 1 and part 30 EN 60335-1 and EN 60335-2-30 and bear a CE mark.

Dr Thomas Wittleder

Managing Director -

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Achim, 10th December 2015

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Dette produktet Holte www.holteindustri.no Håtveitvegen 13, 3810 Gvarv Tlf. 35 95 93 00



### 1. General aspects

# CAUTION: Read carefully before starting up!

Please observe the notes in the operating instructions carefully. In case of non-observation, the warranty claims will become void. The manufacturer shall not be liable for any damage and/or consequential damage resulting.

**Introduction** This chapter contains general information on the unit and manual.

Target group This manual is intended for technicians who install the unit, carry out maintenance

work and replace faulty parts.

**Copyright** The duplication of the this manual in whole or in part shall be permitted only upon

written approval of HEYLO GmbH.

Reservation HEYLO GmbH reserves the right carry out modifications and improvements on the

product and in the manual at any time without previous announcement.

**Disposal** The unit has been designed for many years of operation. If it has to be disposed of,

the competent legal regulations have to be observed in environmentally-gentle

manner.

# DANGER OF ELECTRIC SHOCK WARNING! The unit has to be earthed.

- Use indoors only.
- Protect against spray water.
- If the motor or the winding has got wet, they have to be dried completely prior to use.
- Cleaning can be carried out by compressed air, a vacuum cleaner or by wiping with a moist cloth.
   Never use a hose or high-pressure cleaner.
- In order to reduce the risk of fire or electric shock, this fan must never be operated with a speed control.
- Plug the power plug only into a socket secured by ground fault circuit interrupter.
- Never interrupt the grounding.

#### **FIRE HAZARD**

- Keep the air inlet and the protective grille free from choking and dirt. A reduced air current may lead to the motor overheating. Do not use in the vicinity of curtains or other things that may clog the air inlet opening.
- Do not use in the vicinity of open fire and heat sources.
- Do not use or store in areas where combustible vapours of petrol, solvent or diluting agents are present.

#### Safety guidelines

# WARNING! Prior to opening the housing for cleaning and maintenance purposes always remove the mains plug.

- Always set up the unit on a solid and plane surface.
- Switch off the device and remove the plug prior to lifting or moving the unit. The strong air current makes the control of the unit difficult.
- Check the power cable prior to use. Do not use the unit with a damaged cable. Replace the cable
  by a cable of the same type with the corresponding current strength. Protect the cable against
  damage by switching the unit off first of all and then pulling the mains socket. Never pull the cable,
  but get hold of and pull the plug.
- The unit has been designed for operation at 230 V / 50 Hz. Check whether the socket is earthed.
- Handle the unit with care. Do not drop, throw or place on an instable surface, from where the unit may drop. Rough handling may damage the unit and may lead to dangerous situations or may void the guarantee.
- Keep away from children. Make sure that the unit is not accessible to children when operated unattended.



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#### 2. Use of ventilators / air blowers

PV 3000 is the ideal working instrument for industry, modern craftsmen and service providers - for ventilation when working in shafts, for drying of hollow spaces after water damage or for extraction during welding work in tanks.

The PV 3000 is set up quickly; the hose is connected to the outlet or inlet quickly; and after the work, everything is safely packed away again. On account of the high protection class, the PV 3000 is especially suitable for the rough outdoor use and on building sites.

### 3. Setting up the unit

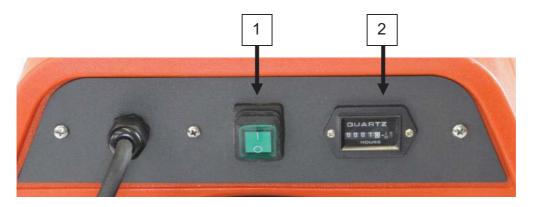
Ensure a secure location for setting up the air mover. The unit must not be operated in puddles or in the area of splashing water. Check to see that no foreign matter is captured by intake air and gets into the fan wheel.

#### 4. Cooling and ventilating

Overheated rooms can be cooled using the high-volume air flow of a blower. To do so, put the device on the floor or another even surface and allow air from cooler areas or from outside to flow in. The feed temperature of the air must not exceed 60 deg. C!

### 5. Operation

- 1. Set up the unit with the direction of the fan towards the requested operating position.
- 2. Push the plug into an earthed 3-pole 230V shockproof socket.
- 3. Set the switch (1) to "I" (EIN/ON).
- 4. Prior to leaving the device, check for perfect operation. Never move the PV 3000 when switched on.
- 5. The operating hours (2) that have run down can be read off at the operating hours meter.
- 305 mm hoses can be connected to the two hose connections.
   Additional accessories are available from HEYLO.





#### **Transport**

During transport in a vehicle, the PV 3000 has to be secured by safety straps in order to prevent that it slips and is damaged or passengers are injured.

#### NOTE!

Safely load to prevent that impact of the motor, fan blades or parts in the inside are damaged.

#### 6. Maintenance / repair

**CAUTION:** Always switch off the fan and remove the mains plug before maintenance and repair. The fan wheel may continue turning when the housing is opened, and the unit is switched on.

#### Before every use

Check power cable Check the power cable for cuts, abrasions and damage. Do not use the unit when the cable has been damaged.

#### Weekly maintenance

Clean the protective grille: Check the fanwheel wings for dirt, dust and deposits. Deposits of fluff and dust reduces the air flow and may lead to overheating of the motor which constitutes a fire hazard. Use a moist cloth to clean the fan-wheel wings or use compressed air. Remove all collected fluss and other materials from the protective grille. Use a vacuum cleaner or a moist cloth to remove fluff and dust from the motor and the cover of the protective grille. WARNING! Make sure that no water penetrates the motor.

**External inspection:** Check external parts, and make sure that they are attached correctly. Check the unit for abnormal noises. Repair or replace parts as required.

**Housing cleaning:** Use a moist cloth to clean the housing. The original gloss of the unit can be restored with HEYLO plastic cleaner, art. No. 1800104.

#### Monthly maintenance

**Check the electric system:** Check the power cable for damage in regular intervals. Regularly remove the fan, and check the cablework for worn cables, loose attachments and discoloration. Replace or repair damaged cables, if and when required. **WARNING!** Damaged cables may cause electric shocks or fire.

**Ball bearings of the motor:** The ball bearings of HEYLO fans have a life-time lubrication. For this reason, do not lubricate.



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# 7. Technical data

Model	PowerVent 3000
Power consumption max. (kW)	0.62
Current consumption (A)	2.9
Air flow rate cum/h (max.)	4200
Air flow rate cum/h (NLV at 250 PA)	1550
Compression (Pa) max.	550
Electric connection (V/Hz)	230/50
Volume 3m dB(A)	78
Height / Width / Depth (mm)	530 / 400 / 520
Weight (kg)	17.5
Hose (diam. in mm)	305
Hose length max. (m)	45

**CAUTION:** Within the scope of further development, technical data may be changed without prior announcement. Some values are approximate values.

# 8. Fault finding and correction

**WARNING**: Maintenance work shall have to be carried out with the unit switched off, i.e. with mains plug removed.

PROBLEM	CAUSE	Versi on	SOLUTION
Motor is not operating	No power to unit. The unit has not been switched on. Impeller is blocked. Air inlet or outlet is blocked. Switch has broken off. Loose wiring.	B B B B AST	Connect the unit; check the fuse. Switch the unit on. Remove the reason for the blockage. Switch the unit off and let it cool down; then remove blockage. Order replacement switch from the dealer or HEYLO. Check wiring and tighten, if required.
The motor is running, but the impeller turns irregularly or makes contact	A heavy impact has bent the motor suspension so that the impeller jams.	AST	Remove the motor from the housing, replace or repair the bent motor suspension.
	A heavy impact has caused the motor to slip out of the suspension so that the impeller jams.	AST	Remove the motor from the housing, then place the motor in the suspension correctly.
Unit vibrates excessively	Collection of dirt on the wheel. Unbalance of the impeller. Impeller is bent. Motor shaft is bent.	B AST AST AST	Clean impeller.  Balance or replace the impeller.  Replace impeller.  Replace motor.

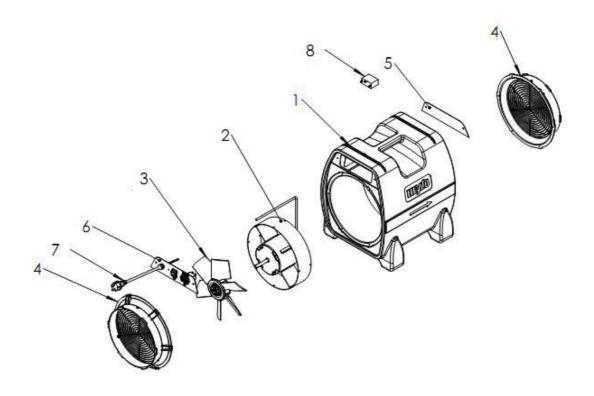
B = User | AST = Authorised service technician

Ask your local dealer for spare parts or get in touch with HEYLO service department.



### 9. List of spare parts

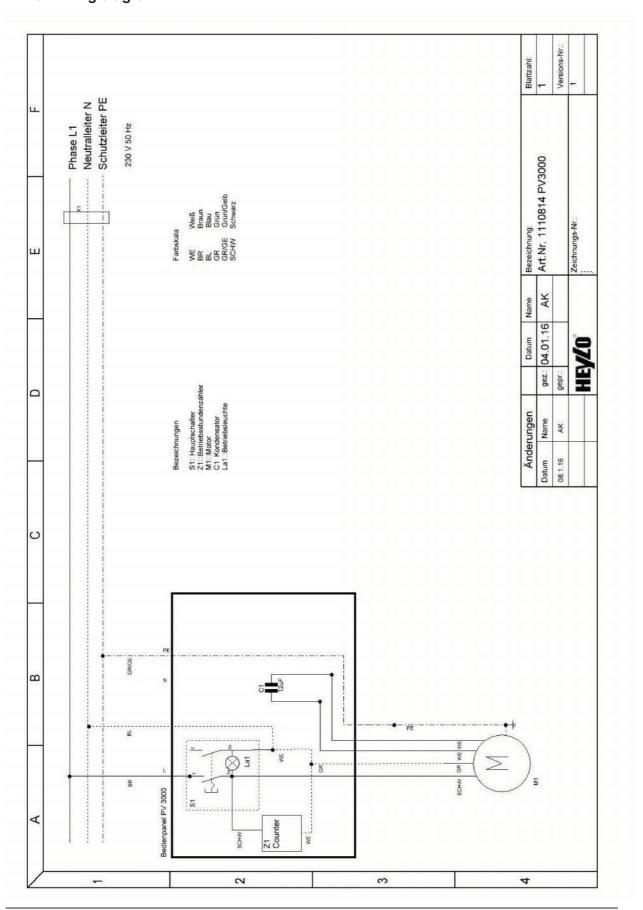
Item	HEYLO - Art. No.	Description
1	1230612	Plastic housing
2	1230618	Motor
3	1230619	Fan wheel
4	1230613	Hose connection socket
5+6	1230622	Operating elements complete
7	1230624	Power cable
8	1230625	Condenser





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# 10. Wiring diagram



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