

OPERATION AND ASSEMBLY MANUAL OF DUCT COLLECTORS TYPE WNF



ENGLISH (Translation)

INTRODUCTION

Please read this instruction carefully to avoid improper use of the dust collector or its damage. The personnel operating WNF dust collectors are required to read this instruction carefully. Improper use and installation of the dust collector may render the guarantee void. Unauthorised changes inconsistent with this instruction may also invalidate the guarantee.

Upon acceptance of the dust collector please check whether:

- 1. The type and size of the collector unit comply with the order,
- 2. Information on the nameplate is consistent with preferred parameters (voltage, frequency, output, etc.)
- 3. The dust collector has not been damaged in transport.

Should any damages be found, please contact the point of sales or the SERVICE TEAM of Venture Industries.

1. INFORMATION AND WARNING SIGNS



- General caution sign



- High voltage



- Danger of finger injury



- Direction of proper unit rotation

2. GENERAL INFORMATION

WNF dust collectors are designed for sucking and collecting chips and dust produced in wood or plastics processing. With a flexible rod the collector may be connected directly to the processing machine. Chips are collected into a plastic bag, which – once filled up – can be removed and discarded together with the contents. This facilitates trouble-free and swift removal of waste.



NOTICE!

USING WNF COLLECTORS FOR TRANSPORTING EXPLOSIVE,
AGGRESSIVE AND TOXIC MATERIAL OR FOR TRANSPORTING AIR OF EXTREME
MOISTURE AND/OR TEMPERATURE OF MORE THAN 60°C IS PROHIBITED.



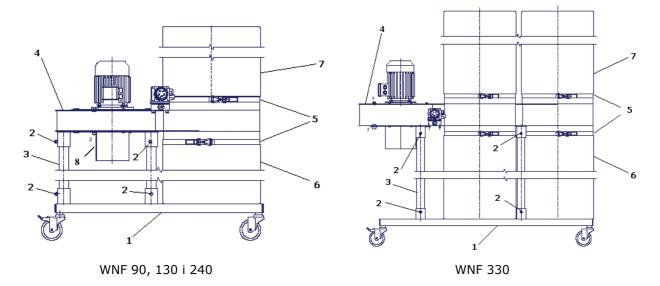
NOTICE!

APPROACHING THE DUST COLLECTOR IN LOOSE-FITTING CLOTHES OR EXTENDING HANDS TOWARDS OPEN FEED OF THE WORKING UNIT MAY RESULT IN SERIOUS INJURY! DO NOT LOOK INTO THE WORKING COLLECTOR UNIT BECAUSE OF RISK OF FACE AND EYES INJURY!

2/9 tel. (22) 751 95 50 www.venture.pl fax. (22) 751 22 59



3. LIST OF PARTS



- (1) base + swivel wheels (2+2 with brakes)
- (2) mounting bolts
- (3) fixtures (1 pc in WNF90 and 130, 3 pcs in WNF 240 and 4 pcs in WNF 330)
- (4) ventilator
- (5) tie bands (2 pcs WNF 90, 130, 240 and 4 pcs in WNF 330)
- (6) waste bag (1 pc in WNF 90, 130, 240 and 2 pcs in WNF 330)
- (7) filtration bag (1 pc in WNF 90, 130, 240 and 2 pcs in WNF 330)
- (8) reduction 100 / 125 (only for WNF 90 and WNF 130)

4. ASSEMBLY

WNF dust collectors are delivered in non-assembled form and must be assembled. The assembly should be carried out according to the following checklist:

- a) Screw in the fixtures to the base (1) with the use of mounting bolts (2).
- b) Place the ventilator (4) on the base and screw tightly with mounting bolts (2).
- c) Place the mounting rings for bags:
- on the upper ring filtration bag
- on the lower ring the plastic waste bag
- d) The bags should be affixed with the rings using tie bands (5).

5. SWITCHES IN WNF DUST COLLECTORS

- WNF 90 S:230V, 50 Hz, 16A
- WNF 90 T:400V, 50 Hz, 16A
- WNF 130 S:230V, 50 Hz, 16A
- WNF 130 T:400V, 50 Hz, 16A
- WNF 240 S:230V, 50 Hz, 16A
- WNF 240 T:400V, 50 Hz, 16A
- WNF 330 T:400V, 50 Hz, 16A

6. INSTALLATION

- 6.1. Every WNF dust collector is equipped as a standard with a switch (see section 5) and 16A socket 230 or 400V. WNF dust collectors are not provided with a power cord.
- 6.2. It is necessary to mount a protector against phase loss in the power network supplying the ventilator, wherein phase loss may result in power disconnection in case of one phase loss (applies to three-phase collectors).
- 6.3. Check whether the rotor rotates in proper direction. Proper rotor direction is marked with an arrow. Operating the unit working in the improper direction may considerably reduce output parameters.

tel. (22) 751 95 50 www.venture.pl fax. (22) 751 22 59 3/9



7. OPERATING A WNF DUST COLLECTOR

Connect the dust collector to the power socket. Press the green button to start the unit and the red button to stop the unit. The filtration bag should be cleaned according to needs and usage intensity. Failure to clean the bag may result in lower collection performance.

If the dust collector switches off due to overload, please wait a few seconds before switching it on again. If the dust collector switches off once more, please check the power installation and remove the cause of switch-off.

Before switching on the dust collector, please ensure that nothing obstructs free rotating movement of the ventilator's rotor. If the rated voltage of the engine specified on the nameplate is exceeded in normal use conditions of the ventilator, please check whether:

- The voltage and power frequency correspond to data on the nameplate,
- The ventilator (rotor, bearing unit) has not been damaged mechanically,
- The unit has been properly chosen for installation.

8. CLEANING THE WASTE BAG

To clean the waste bag, please loose the tie band (5) and carefully remove the bag, avoiding the spilling of contents. Fit an empty (or new) bag on the tube and tie the band (5).

9. SAFETY REQUIREMENTS

Please read the instruction carefully and conform to it. Adherence to the instruction may help prevent accidents, harms and injuries and also protect the dust collector against damage.



IMPORTANT! IN CASE OF FIRE PLEASE USE EXTINGUISHERS FOR ELECTRICAL DEVICES.

10. TECHNICAL DATA

	WNF 90T	WNF 90S	WNF 130T	WNF 130S	WNF 240T	WNF 240S	WNF 330T
Output [m³/h]	900	900	1200	1200	2400	2400	3350
Pressure [Pa]	1800	1800	1800	1800	2200	2200	2400
Acoustic pressure level dB[A]	73	73	73	73	76	76	80
Rotational speed [rotations per minute]	2800	2800	2780	2780	2820	2820	2860
Engine power [kW]	0,37	0,37	0,55	0,55	1,1	1,1	2,2
Electric current [A]	1,0	3,0	1,32	3,8	2,5	7,2	4,6
Mains electricity [V]	400	230	400	230	400	230	400
Weight [kg]	45	45	49	49	58	58	87
Filtration bag surface [m ²]	1,3	1,3	1,3	1,3	2,0	2,0	2 x 2,0
Waste bag capacity [I]	170	170	170	170	170	170	2 x 170
Feed diameter [mm]	Ø 100/125		Ø100/125		Ø160		Ø200

4/9 tel. (22) 751 95 50 www.venture.pl fax. (22) 751 22 59



11. TERMS OF GUARANTEE

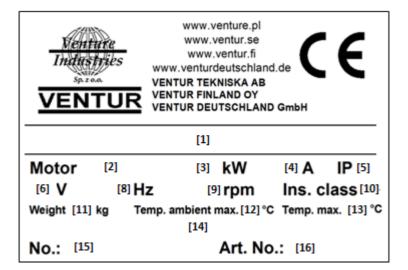
- The guarantee covers all hidden defects and damages occurring in the period of guarantee at the producer's fault (i.e. in result of defective material, processing or assembly).
- The period of guarantee is 24 months from the date of purchase. In case of a repair the period of guarantee shall be extended by the time that lapsed from the moment the dust collector is reported for repair until notice about repair completion.
- The scope of guarantee does not include activities specified in the manual (technical & operating documentation) and qualifying as normal use service (e.g. installation, cleaning and maintenance).
- The wear of parts and consumables in conditions of normal use does not entitle to any claims under this guarantee.
- The guarantee shall become invalid in case of improper installation and use of the machine (against its purpose and the manual/technical & operating documentation), if repairs or construction changes are made without consent of the producer/importer, if damages are found which are caused by external factors (mechanical, chemical damage, flooding, etc.) and in case of lack of a legible producer's nameplate.

Complaints shall be considered upon submittal of a filled-in guarantee card and delivery of the damaged machine together with purchase proof.

tel. (22) 751 95 50 www.venture.pl fax. (22) 751 22 59 5/9



Appendix - A (Product indication)



- [1] product full name
- [2] motor type
- [3] motor power
- [4] nominal current
- [5] motor IP class
- [8] nominal voltage
- [8] power supply frequency
- [9] nominal fan speed

- [10]- motor insulation class
- [11] weight
- [12] max ambient temperature
- [13] max temperature of transproted medium
- [14] informetion of accordance with ErP Directive (if apply)
- [15] serial number
- [16] Art. No.

Additional information indicated on the device

- arrow informing about correct direction of impeller rotation
- arrow informing about correct air flow direction
- indications related to safe use of device



Appendix B - (The device receipt form)

Before launch	Check confirmation	
Type and model of extraction are in accordance with the order.		
The extraction is undamaged.		
There is no foreign body inside extraction inlet and outlet channel, and the fan is clean.		
The extraction is reliably and solidly fixed in workplace.		
Ambient temperature and transported medium temperature are compatible with extraction nameplate		
Proper electrical protection is applied		
Grounding of fan is applied.		
Network power supply is compatible with fan power supply.		
Power supply disconnecting switch is applied.		
Personnel using the fan read and understood the operation and montage manual.		
After fan launch (continuous work period minimum 30 minutes)		
Readings and set of vibration measurement device has been written (they are available in future)		
Value of current for each of phase does not exceed nominal one		
The vibration value is not higher than permitted.		

tel. (22) 751 95 50 www.venture.pl fax. (22) 751 22 59 7/9



Appendix - C (EXAMPLES OF DEVICE FAULTY WORKING)

SYMPTOMS	POSSIBLE REASON
Excessive vibration or noise	•Used or damaged impeller
	•Fan levelled in wrong way
	•Dirt accumulated on impeller caused loss of balance;
	•Impeller loss of balance
	•Parts rubbing;
	•Damage or wear of bearings;
	•Damage of measurement system, that is responsible for signalization of excessive vibration.
	•Deformed motor shaft;
	•Loose of impeller fix screw, impeller is loose on motor shaft;
	•Loss of balance of motor impeller or damage of motor (wear/damage of bearing)
	•Rubbing between fan impeller and housing;
	Damage or wear of bearings;
	Damage of motor windings (overheat, insulation degradation, insulation breakdown etc.);
Motor overload	Damage of switch or security system;
	•Failure of one of supply phases;
	•Exceeding of maximum motor speed;
	•Too low flow
	•Rubbing between fan impeller and housing or foreign body (e.g. tool left after installation);
	•Failure of one of supply phases;
Failed fan start-up	•Failure of start-up system, e.g. Y/D
Tanea fan Start ap	•Reset of security devices has not been made, wrong security device
	Motor connected in wrong way or damaged
	Too low supply voltage
	•Excessive start-up time
	•Motor overload
Protective devices	•Motor launching done too often (thermal protection – if applied or overheating)
activation during fan	•Improper set of protection system e.g. in system with PTC or thermocontact sensors (if applied)
work and overheating	•Improper cross-section of power supply wires
	•Lack of sufficient motor cooling eg. dirt placed on motor cooling impeller (thermal protection – if applied or
	overheating)
	Damage of device
Too low flow	•Too low power supply frequency
	Obstacles in ventilation installation
	Damaged bearings

8/9 tel. (22) 751 95 50 www.venture.pl fax. (22) 751 22 59



Appendix - D (Declaration of Manufacturer)

EC/EU Declaration of Conformity

Manufacturer:

Venture Industries Sp. z o.o.

ul. Mokra 27

05-092 Łomianki-Kiełpin

Polska

Inclusives
Sp. z o.o.

doc. no. MF1.1.02012019 EN

declares that the product described below:

Name:

Exhauster

Type:

WS / WNF

Model and serial no.:

all manufactured

CE marking date:

2010

Use/Function:

transport of specified medium

complies with the requirements of:

Machinery Directive 2006/42/EC

Electromagnetic Compatibility Directive 2014/30/EU

Following standards were applied (partially or full):

EN ISO 12100

EN 60034-1

EN 60204-1

EN ISO 13857

Furthermore:

- The person authorized to comply the relevant technical documentation: *Piotr Pakowski (Lotnicza 21A, 86-300, Grudziądz, Poland)*.
- Quality system is in accordance with ISO 9001:2015.

Wojciech Stawski Managing Director

Date: 02.01.2019

Kiełpin

tel. (22) 751 95 50 www.venture.pl fax. (22) 751 22 59 9/