

Use and Maintenance Manual

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Portable axial fan PODRYW-N

807W44-PODRYW-500-N-11.06.2019/EN

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1. Introductory Remarks

The purpose of the present Use and Maintenance Manual is to supply User with directions within the range of application, installation, start-up and the operational use of the **PODRYW-N portable axial fan**.

Installing, start up and operational use are exclusively admissible after getting acquaintted with the contents of the Use and Maintenance Manual.

With regard to continuity of work carried on improvement of our products, we reserve for ourselves the revision possibility of the draft and technological changes improving their functional features and safety.

The construction of the **PODRYW-N portable axial fan** meets the requirements of the current state of technology as well as the safety and health assurances included in:

- 2006/42/EC Machinery Directive of the European Parliament and of the Council of May 17th, 2006 on machinery amending the 95/16/EC (recast) /*Journal of Laws EC L157 of 09.06.2006, page 24/*
- 2014/35/EC Directive of the European Parliament and of the Council of February 26th, 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits.
 /Journal of Laws EC L96 of 29.03.2014/

The appliance meets the requirements included in:

- 2009/125/EC (ErP) Directive of the European Parliament and of the Council of October 21th, 2009 establishing a framework for the setting of ecodesign requirements for energy-related products /Journal of Laws L285 of 31.10.2009/
- 327/2011 (EU) Commission Regulation of March 30th, 2011 on implementing the 2009/125 /EC Directive of the European Parliament and of the Council with regard to ecodesign requirements for fans driven by motors with an electric input power between 125W and 500 kW /Journal of Laws L90 of 06.04.2011/

The device has been constructed and produced on the basis of following harmonized standards:

• EN ISO-12100:2012	 "Safety of machinery. Basic concepts, general principles for design. Risk assessment and risk reduction".
• EN 60204-1:2018-12	- "Safety of machinery. – Electrical equipment of machines.
	Part 1: General requirements".
 EN 60034-1:2011 	 "Rotating electrical machines – Part 1: Rating data and
	parameters".
• EN ISO 5801:2008/A1:2015-07	 "Industrial Fans – Performance testing in situ of installing".
 EN ISO 13857:2010 	"Safety of machinery. Safe distances to prevent hazard zo-
	nes being reached by upper and lower limbs".
• EN 60335-2-80:2007/A2:2009	"Household and similar appliances. Safety of operational
	use. Part 2-80". Particular requirements for fans".

2. Application

PODRYW-N portable fans are for subsequent applications:

- aeration of rooms and workplaces
- air supply onto the people being in the environment of increased temperature, in order to improve their thermal comfort
- air supply onto hot objects / elements to cool them down
- air supply towards the objects being filmed or photographed, to obtain the imitation of air movement, wind – for advertising
- drying the humid rooms

The fans can be applied in various rooms – manufacturing halls, TV studios and advertisement ateliers, household rooms, storehouses, rooms in a farm, etc.

The air must be dry, of temperature up to 40°C and of dustiness not exceeding 0,3 g/m³, without viscous contaminants, aggressive substances or media creating explosion hazard.



3. Reservations of Producer

A. Manufacturer is not liable for any consequences following from the operational use that is in contradiction to the purpose of application.

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- **B.** Do not install any additional elements not belonging to the normal device structure or accessory set.
- **C.** Any structural changes or modifications on the appliance on one's own are not permitted.
- **D.** Protect the device housing from mechanical damage.
- E. The fan is not appropriate for conveying the air polluted with a mixture of flammable substances in a form of gas, vapour, mist or dust, that could create the explosive at-mosphere.
- **F.** The device cannot be applied for conveying the air containing viscous impurities, that can build up on the device structure, especially on the impeller.
- **G.** During the use, maximum impeller rotations should not be higher than nominal rotations.
- H. Manufacturer is not responsible for wounds / body laceration caused in the course of careless operational use.

4. Technical Data

Table No.1

Туре	Volume flow	Supply voltage	Nominal rotations	Motor rate	Admissible temperature in the work zone	Acou pressur [dB(measure dista	e level A)] ed from	Weight
	[m³/h]	[V]	[1/min]	[W]	[°C]	1 m	5 m	[kg]
PODRYW-500-N	8850	230	1390	370	40	68	55	17

All the data are specified for the maximum range of the potentiometer setting.



 Table No.2
 A [mm]
 B [mm]
 C [mm]
 D [mm]
 E [mm]

 PODRYW-500-N
 620
 Ø 565
 Ø 500
 230
 467



5. Structure and Function

PODRYW-N consists of an axial fan and a supporting frame. On the fan housing are installed fastenings holding the along its horizontal axle, therefore the fan can be rotated and positioned at most suitable angle, according to the needs of operator. The clamping knobs can lock the fan position stably (see Fig. No.2).

Rotation speed are adjusted by a potentiometer located on the fan housing, providing the adjustment of the volume flow efficiency (see Table No.1 "Technical Data").

Due to the low noise and insignificant current consumption, it can work continuously, not causing unpleasant conditions for personnel/people in the vicinity.

The fan is equipped with a power supply cable of length 1,5 metre. The front- and back side of the fan is secured with a protective wire net, to avoid entering objects / users hand into the impeller.



Fig. No.2 – PODRYW-N – description

6. Assembly and Start-up

PODRYW-N is delivered in two assemblies – the fan and supporting frame. First, screw up the fan to the frame, by means of the locking knobs, along with the toothed washers, that are delivered along with the device and the frame. The fan should be installed correctly, according to the markings. After the installing, set the fan under suitable angle and insert the plug into the power supply socket. Energising proceeds simply by turning the potentiometer and the rotations are set by the potentiometer too. To stop the fan turn the potentiometer into position zero.

7. Operational Use

The fan construction and its reliable execution provides efficient function without constant routine technical supervision. In case when malfunctions, untypical noises or vibrations occur – immediately disconnect the fan from the power supply.



8. Troubleshooting Guide

Table No.3

	Problem	Possible reason	Corrective action
1.	Suddenly vibrations occur	an obstacle / debris impeding the work got stuck in the impeller	disconnect the fan from the power supply and remove the barrier object
2.	noisy work	the impeller is incorrectly balanced or the motor bearing is damaged	balance the impeller or replace the motor bearings

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9. Maintenance

The construction and a solid execution of the fans guarantee its operational use, without constant routine maintenance. Nevertheless, in the course of operational use, execute routine maintenance steps. Once a year, carry out technical supervision of the fan and its motor, according to the indications of the manufacturer of the motor.

Every several years, examine the mechanical and electrical connections. The electrical system ought to be checked according to the PN-HD 60364-6 "Electrical systems of low voltage – Part 6: inspection". In case when malfunction of the fan is noticed, undertake additional inspection.

WARNING

All technical revisions and maintenance have to be executed by an authorized qualified person and after the disconnection from the power supply system.

10. Occupational Health and Safety

Start up and the operational use of the fan are admissible exclusively after getting acquaintted with the contents of the present Use and Maintenance Manual. The fan will not cause any hazard under the condition the rules included in the instruction are observed.

WARNING

Any activities relating to the electrical system must be performed after the fan is disconnected from the power system.

CAUTION: All fans, as rotary equipment could constitute potential source of hazard in case when:

they are not installed, started up and submit to servicing by authorised personnel,
are not used according to their purpose of application.

Do not use the fan in rooms / areas with viscous contamination, aggressive (chemically active) substances or media that cause explosion hazard.

Technical revision of the fan can be performed exclusively by a qualified person.

11. Transport and Storage

The appliance should be wrapped in foil and placed into the cardboard package. During the loading / reloading and transport pay attention that the fan is not thrown, overturned, and not charged with a load on its top. Do not put one package on another (no stacking). During the transport, protect it from atmospheric factors / weather conditions. The fan should be stored in dry rooms with sufficient aeration or ventilation.



12. Terms of warranty

The period of warranty for the purchased device is indicated in the "Card of Warranty". The warranty does not comprise:

- mechanical damage and dysfunctions caused by User,
- device failures caused during use which was in contradiction with the purpose of operational use and the present Use and Maintenance Manual,
- damages being entailed during the improper transport, storage or incorrect maintenance.

Infringement of the Section 3 "Reservations of Producer" of the Use and Maintenance Manual and especially modifications undertaken by User on one's own shall cause the loss of warranty validity.



13. Sample of the Declaration of Conformity

Declaration of conformity EC No.

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Manufacturer (eventually the authorized representative / importer): name: KLIMAWENT S.A. address: 81-571 Gdynia, Chwaszczyńska 194

A person, authorized for issuing the technical documentation: Teodor Świrbutowicz, KLIMAWENT S.A.

hereby declares that the appliance: name: **portable axial fan**

type/model: PODRYW-N

serial number: year of production:

meets the requirements of the subsequent European Directives:

- 2006/42/EC Machinery Directive of the European Parliament and of the Council of 17 May, 2006 on machinery - amending the 95/16/EC (recast) /Journal of Laws EC L157 of 09.06.2006, page 24/
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	nes being reached by upper and lower limbs".
• EN 60335-2-80:2007/A2:2009	"Household and similar appliances. Safety of operational
	use. Part 2-80". Particular requirements for fans".

place, date

signature of authorised person

name, surname, function of the signatory

KLIMAWENT S.A.

Supported Employment Enterprise 81-571 Gdynia, ul. Chwaszczyńska 194 phone: +49 58 829 64 80 email: <u>klimawent@klimawent.com.pl</u> www.klimawent.com.pl District Court Gdańsk-Północ in Gdańsk, VII Wydział Gospodarczy of the National Register of Court KRS 0000308902 company stock 13.779.200 zł paid in total NIP: 958 159 21 35 REGON: 220631262 Bank Account: **Santander Bank Polska S.A.** 56 1500 1025 1210 2007 8845 0000



8 Klimawent – the warranty of highest quality at attractive price

NOTES: