Use and Maintenance Manual

Axial wall fans WW 302-KL

806W01-WW-302-KL-04.06.2019/EN

Contents:

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 **WW 302-KL axial wall fan**.

Installing, start up and operational use are exclusively admissible after getting acquainted 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 **WW 302 KL axial wall 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 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 zones being reached by upper and lower limbs".

2. Application

The industrial wall extraction fan WW 302 KL is designed for air exchanging in industrial rooms. It is not appropriate for application as a fan for dwelling rooms/flats. The fan is suitable for workshops, production enterprises or gastronomic facilities.
Its feature are silent work and low electrical energy consumption. The maximum temperature of the conveyed air is 60°C whereas the ambient air temperature in the work zone ought to be 40°C. The fans can be used for forwarding the air of dustiness not exceeding 0,3 g/m^3.

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.

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 fans are 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 atmosphere**.

F. Don't use the fan for conveying the air containing viscous compounds that would deposit within the appliance, especially at the impeller.

G. Neither apply the fans for conveying the air containing aggressive compounds that would have destructive effect on the device structure.

H. In the course of operational use, the maximum impeller rotations should not exceed their nominal rotations.

I. Manufacturer is not responsible for any wounds or body lacerations, experienced during the improper operational use of the appliance.

4. Technical Data

Table No.1

Type	Supply voltage [V/Hz]	Motor rate [W]	Rotations [1/min]	Maximum volume flow [m³/h]	Maximum fan pressure [Pa]	Acoustic pressure level measured from 4m distance [dB(A)]	Ingress protection	Weight [kg]
WW-302-KL	230/50	60	1300	960	70	60	42	~4,5

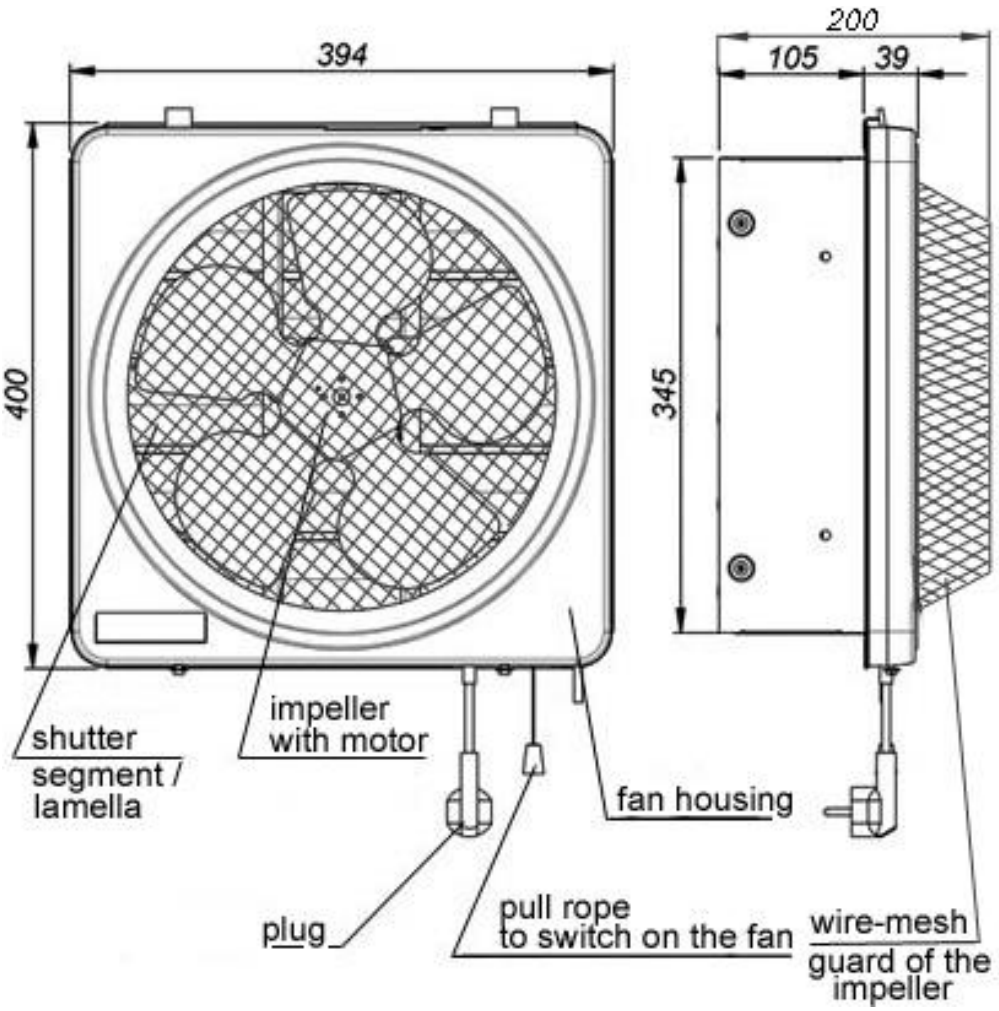

Fig. No.1 – Structure, dimensions

5. Structure and Function

The WW 302 KL axial fan consists of a square steel sheet housing, with centrally installed motor. On the motor shaft is installed a five-blade aluminium impeller, fastened by means of a mounting screw. The impeller is protected by a wire-mesh to avoid entering the hands into the rotating impeller. The back wall consists of a self-swinging shutter, the opens after the fan is started and closes when the fan is switched off.
Standard equipment of the fan are self-swinging shutter, to protect the fan externally from weather conditions and from wind impact. During the work, the device extracts the air from room and directs it outside, through the shutter and swinging guard. The fans can work in vertical position only.

6. Assembly and Start-up

The fan should be installed in an opening in the wall, in a height higher than 2,3 metre above the floor, by means of 4 rawlplugs. Outside the wall must be installed a swinging guard.
If needed, the swinging guard should be left in constantly open position, by blocking it with screws from both sides. To switch on the fan, simply insert the power supply plug into the 230V socket and pull the rope switch.

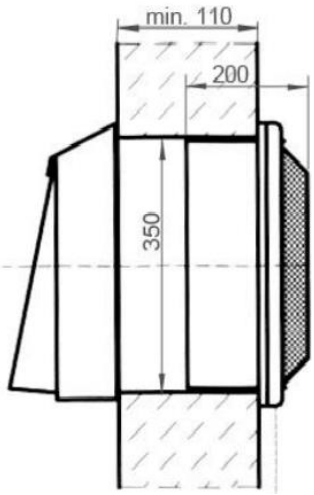

Fig. No.2 – Installing

7. Operational Use

Construction of the fan and its robust execution provides reliable function without constant routine maintenance.
Examples of incorrect application:
a/ forwarding of media of temperatures exceeding the admissible temperatures, i.e. above 40°C
b/ forwarding the aggressive and viscous media,
c/ forwarding the media of high dustiness.

Consequences of incorrect operational use:
– damage of bearings
– loss of balance of the rotary elements
– vibrations
– deformations
– damages caused by friction.

In case when malfunction of the device are noticed (increased noise, vibrations, decreased flow efficiency) disconnect the fan from power supply system and execute technical revision, in order to spot the reason of functional malfunctions. Typical malfunctions, their reasons are listed in Section 8.

8. Troubleshooting Guide

Table No.2

	Problem	Possible reason	Corrective action
1.	The swinging shutter do not lift, creating barrier for the inlet air flow to get outside.	The mounting points of the swinging lamellas got rubbed tight due to the accumulated Impurities or the lamellas are installed too tight.	Clean the mounting points, and the lamellas themselves or release their frictional tension.
2.	After the work is completed, the swinging shutter do not return to home position, i.e. the lamellas do not fall.	as above	Clean or release the mounting points of the shutter segments.

9. Maintenance

The construction and a solid execution of the fans guarantee its operational use, without constant routine maintenance. After disconnection from the power supply system, clean it with a flannel cloth or, in case of strong pollution with a cloth soaked in washing-up detergent, whereby mind that the electrical elements would not get wet.
In order to clean the impeller, simply, take off the impeller by releasing its mounting nut.

10. Occupational Health and Safety

Start up and the operational use of the fan are admissible exclusively after getting acquainted with the contents of the present Use and Maintenance Manual. The fan will not cause any hazard under the condition it is correctly and firmly mounted on the wall. The fan motor must be connected to the power supply system in accord**ance with the valid regulations within the range of personal protection against the electrical shock and protection from**
the short-circuit- and overload effects.
Regulations concerning the safety are included in the IEC 60364 “Electrical installations in buildings”.

11. Transport and Storage

The fans ought to be stored in dry rooms and in areas of efficient ventilation. They should be transported in cardboard packages, whereby important is to protect them from overturn.

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. ……..

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: **axial wall fan**

type/model: **WW 302 KL**
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*/
- **2014/35/EC Directive** of the European Parliament and of the Council of 26 February, 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 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 5802:2008/A1:2015-07**	– "Industrial Fans – Performance testing in situ of installing"
• **EN ISO 13857:2010**	"Safety of machinery. Safe distances to prevent hazard zones being reached by upper and lower limbs"

……	……	……
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: klimawent@klimawent.com.pl
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

NOTES:

NOTES: